# THE AMERICAN NEPTUNE

A QUARTERLY JOURNAL OF MARITIME HISTORY

Volume XLVII, No. 1 Winter 1987

Vol. XLVII, Winter 1987 ISSN 0003-0155

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THE AMERICAN NEPTUNE is published quarterly in Winter, Spring, Summer and Fall, by The Peabody Museum of Salem, Salem, Massachusetts. The officers of the corporation are: Richard Wheatland, President, Susanne L. Phippen, Secretary, and Jonathan Loring, Treasurer. The support of the journal depends upon receipts from subscriptions, and no payment is made for contributions or for editorial work.

In 1987 the subscription rate will be $32.00 per year for domestic subscribers and $35.00 per year for foreign subscribers. Subscriptions are accepted only for complete volumes, which coincide with the calendar year. In return for subscriptions received after the beginning of the year, subscribers will receive the numbers that have already appeared in the current volume, as well as the numbers that will be published during the remainder of the year. Single copies are $8.50 each in 1987. Certain complete volumes of back issues are available although in cases where the supply is greatly reduced some numbers are sold only as parts of complete volumes.

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Second-class postage paid at Salem, Massachusetts, and at additional mailing offices.
Subscriptions should be addressed to THE AMERICAN NEPTUNE.
Manuscripts, books for listing, and correspondence should be addressed to The Editor.
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THE AMERICAN NEPTUNE

Peabody Museum, East India Square, Salem, Massachusetts 01970

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SALEM, MASSACHUSETTS

PUBLISHED BY THE PEABODY MUSEUM OF SALEM, SALEM, MASSACHUSETTS

THE ANTHOENSEN PRESS, PORTLAND, MAINE

PRINTED IN THE UNITED STATES OF AMERICA

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# EDITOR'S COMMENTS

THIS issue of the *Neptune* is almost completely concerned, as far as its articles are concerned, with American maritime history over the past century and a half. We begin with David Syrett's "The Navy Board and Merchant Shipowners During the American War, 1776-1783." This is concerned with the relationship between merchant shipowners and the Navy Board which had the responsibility not only for the construction of British warships in time of war and peace but of the chartering of merchants ships needed by the Admiralty for naval operations. As one might expect, during the American Revolution these relations were often strained and anything but harmonious. It is interesting to compare what Syrett has discovered covering all this during the late eighteenth century and what Timothy Runyan has reported in a recent article in the *Neptune,* taking place during the Hundred Years' War.

We next turn to Tyrone Martin's "Isaac Hull's Victory Revisited." This is an account of how the U.S. frigate *Constitution,* which we all know as "Old Ironsides," actually fought its famous action with *Guerriere.* Interestingly enough it seems that Isaac Hull's short report of this action, which was published everywhere in the United States shortly thereafter, was not completely accurate, and our author here sets the record straight.

This is followed by a long article by W. M. P. Dunne entitled, "The South Carolina Frigate: A History of the U.S. Ship *John Adams.*" This vessel, built in 1799 in Charleston, had a long and distinguished career in the West Indies, in the Mediterranean off Tripoli, in South America and even travelled around the world and spent much time in the Pacific as part of the Pacific Squadron. She then was part of a fleet blockading Charleston during the Civil War. Finally she was scrapped in Boston in September 1867. To follow the career of this ship then is to trace the development of the American navy over almost seven decades.

In contrast to this last article we have James Delgado's "Steamers to Savannah: The Origins and Establishment of the New-York and Savannah Steam Navigation Company." This line which began in 1847 used steamers instead of sailing ships and lasted down until the Civil War. It shows that while the navy continued to use wooden ships, as seen in the last article, the merchant community in the South at least by the 1840s and 1850s was already making use of steam.

Finally we have the interesting story of how during the depression years of the 1930s much of the world's largest tanker fleet lay idle in the Patuxent River in the Chesapeake until, by 1939, World War II made these vessels again useful and necessary to the world's shipping pool. And we close this issue with a number of important book reviews.

We would also like to suggest to our readers and contributors that we would welcome brief notes that might interest the maritime community at large. When enough of these notes are available we'll try to set up a special section of the journal for them.

ARCHIBALD R. LEWIS

Salem, Massachusetts

# The Navy Board and Merchant Shipowners During the American War, 1776-1783

DAVID SYRETT

DURING the war in North America and the West Indies, the Navy Board chartered under long-term agreements from 1776 to 1783 scores of merchant ships to serve as transports and victuallers.[1] In addition, at the same time the Commissioners of the Navy hired a number of ships under short-term charters and also rented cargo space on various other merchant ships for specific voyages.[2]

The Navy Board was the chief administrative agency under the Admiralty, whose duties were to oversee the construction and procurement of all warships employed by the Royal Navy. During the American War the Navy Board, or the Commissioners of the Navy as its members were called, was charged with the responsibility of chartering all the ships and vessels required for the transport of British troops, military supplies, and after 1779 army provisions.[2a]

Most of the extant information concerning the merchant ships under charter to the Commissioners of the Navy during the American War can be found in the minutes and other records of the Navy Board.[3] On the other hand, little is known about the owners of ships under charter to the Commissioners of the Navy, for few eighteenth-century British shipowners' papers have survived.[4] Nevertheless, the records of the Navy Board contain enough material to delineate the contractual relations between merchant shipowners and the Navy Board and the way in which the Commissioners of the Navy employed chartered merchant ships.

The ships hired by the Navy Board as transports and victuallers entered into government service for "six months certain." This, however, was often a meaningless provision, for most such agreements also stipulated that the ships had to remain in service until "receiving notice of discharge." When the Navy Board chartered ships or cargo space on ships on a limited basis, the contracts specified the tasks each such ship was to perform. Under these contracts coasters were regularly hired to carry cargoes, such as naval stores, from one British port to another and to transport men and stores from the British Isles to various overseas ports.[5]

During the American War the Navy Board was undoubtedly the largest single operator of merchant ships under long-term time charters in the world. At any given time during the war the Commissioners of the Navy had under long-term charters an average of 322.5 merchant ships with a combined average tonnage of 96,637 tons.[6] Among the London merchants, ship brokers, and underwriters who concluded agreements for shipping with the Navy Board was John Wilkinson, who on 16 December 1776 tendered twenty-six ships for charter and on 15 January 1777 offered an additional twenty-seven ships for charter.[7] Other large suppliers of shipping for charter by the Navy Board were

1. David Syrett, *Shipping and the American War, 1775-1783* (London, 1970), pp. 249-50.

2. Ibid., p. 61.

2a. For a full account of the structure and history of the Navy Board see K. G. Usher, Jr., *The Civil Administration of the British Navy During the American Revolution* (unpublished University of Michigan Ph.D. thesis, 1942), pp. 50-120.

3. E.g., Public Record Office, ADM/106/2593-2611. Hereafter this archive will be cited as PRO.

4. In archives in the United States there are extensive collections of the papers of eighteenth-century merchants and shipowners. Cf. Evarts B. Greene and Richard B. Morris, *A Guide to the Principal Sources for early American History (1600-1800) in the City of New York* (New York, 1953, 2nd ed.), pp. 247-70.

5. See PRO, ADM/106/2593-2611 passim.

6. Syrett, *Shipping*. . . , pp. 249-50.

7. PRO, ADM/106/2594, 16 Dec. 1776; ADM/106/2595, 15 Jan. 1777.

J. J. Angerstein; Mure, Son, and Atkinson; Drake and Long; and Ord and Richardson. These brokers and merchants acted not only as agents for ships from London, but also those from the Out-Ports.[8]

The ability of the Navy Board to procure ships on a short-term basis depended in large part on the pattern of the British carrying trade. The Commissioners of the Navy found it extremely difficult to hire ships on a short-term basis to carry goods to a port such as New York during the American War because the shipowners found it hard—if not impossible—to obtain a cargo for the return trip to Britain. Thus, the Navy Board tended to ship men and goods on ships under short-term agreements to several well-defined regions where exports to Britain required greater cargo space than imports from Britain. Two such regions of great strategic importance to the British were the East and West Indies.

Although on two different occasions during the American War the Navy Board attempted and failed to obtain the use of East India Company ships to transport troops to America, it generally had little or no difficulty in obtaining cargo space from the East India Company for government transport to India.[9] Unlike the individual merchants and shipowners with whom the Navy Board usually dealt, the East India Company was not only a huge business corporation, it was also for all practical purposes a semi-autonomous branch of the British government. The company ruled vast regions of the Indian subcontinent, where it maintained a large military establishment. Although by law the East India Company was required to ship a certain amount of British goods to the East, the company was unable to find a European product which could be traded for Indian and Chinese goods. As a result, the company's ships carried mostly bullion to the East Indies,[10] and was, therefore, in normal times able to grant free space in its ships for the transport of the King's troops and stores to India.

At the beginning of the fighting in India in 1779, it appeared that the transport of men and stores to India would not place any demands on shipping under the control of the Navy Board.[11] This, however, was only a temporary respite, for the military situation in India soon demanded the dispatch of more troops and stores than the company's ships could carry. In January 1781, the government was forced to use one naval storeship, six naval transports, and three transports under charter to the Navy Board as well as two Ordnance Board storeships and two navy victuallers to carry troops and stores to India.[12] Despite the fact that the company's shipping shortage persisted until the end of the war, the Royal Navy had to send only two additional navy storeships to India with stores for the British squadron in the Indian Ocean.

The economics of Britain's trading relations with the West Indies were similar in many respects to those with the Far East. Even when American supplies of timber and foodstuffs were cut off, British merchant ships went to the West Indies half loaded, for Britain imported far more goods from that region than she exported to the Caribbean.[13] As Richard Pares has noted, "The profit of owning ships in the West-India trade depended, above all, on the rate of homeward freight."[14] When the fighting broke out in the West Indies between the British and the French in 1778, it made strategic sense for the Navy Board to send military cargoes to the West Indies in merchant ships, and this decision gave the owners of these vessels the opportunity to make some extra money on each such voyage.

The most successful series of short-term agreements made by the Navy Board were those with the London merchants for the transport of troops to the West Indies. The first regiment to be sent after the French had entered the American War in 1778 was the 79th Foot which embarked from Portsmouth for Jamaica on 15 March 1779. Although it is not known who thought of using merchant ships to carry troops to the West Indies, it appears that Lord George Germain, a secretary of state, first discussed the idea in January 1779, with Stephen Fuller, the secretary of the West India Committee. Fuller then consulted with Beeston Long, chairman of the West India Committee, who in turn called a meeting of merchants who traded with the West Indies and the masters of West Indian ships at the Jamaica Coffee House.[15] At this meeting the terms upon which the West

8. E.g., PRO, ADM/106/2601, 16 Nov. 1779; ADM/106/2602, 27 Jan. 1781.

9. Syrett, *Shipping*. . . , p. 72.

10. Ralph Davis, *The Rise of the English Shipping Industry in the Seventeenth and Eighteenth Centuries* (London, 1962), p. 258.

11. Syrett, *Shipping*. . . , p. 74.

12. PRO, ADM/1/164, f. 236.

13. Davis, op. cit., pp. 269-99.

14. Richard Pares, *A West-India Fortune* (London, 1950), p. 231.

15. British Library, Add. MSS., 38210, ff. 198-99. Although officials and members of the West India Committee were deeply involved in mak-

Indian merchants and shipmasters would be willing to transport troops in their ships were decided.

The West Indian merchants' proposal to carry the 79th Regiment to the West Indies on their ships undoubtedly appealed to the Commissioners of the Navy. Not only would it result in saving 2,200 tons of shipping required for other uses, but also the ships the West Indian merchants proposed to carry the troops were large, well-manned, and heavily armed vessels which were ideal for transports. On 26 January the Navy Board agreed with the owners of fourteen West Indianmen that the 79th Regiment would be transported to Jamaica at the rate of "6 per head, [and] be victualled in the usual manner as on transports." Forty-eight hours after the troops had embarked, the owners would receive demurrage at the rate of 1s per soldier embarked per day for every day the ships were detained in European ports. The Navy Board would also pay demurrage at the rate of 15s per day per soldier for ships detained in West Indian ports. Personal equipment and baggage, within reason, would be carried free, while camp equipage and the like would be paid for at the rate of 40s per ton. The Navy Board would provide beds and bedding and the shipowners were to furnish provisions, water, and eating utensils. The shipowners were to be paid in cash or in "Navy Bills with £ 6 percent added thereto for discount."

The use of merchant ships to carry the 79th Regiment to the West Indies proved so successful to both the Navy Board and the owners of the West Indian ships that until the end of the war troops were sent to the West Indies by merchant ships. Between 1779 and 1782 some 7,500 troops were carried to the Sugar Islands on merchant ships, thus enabling the Navy Board to use approximately 15,000 tons of shipping for other purposes. The use of outward-bound West Indian ships to carry troops to the Caribbean during the American War was truly a marriage of economic convenience and strategic necessity.[16]

Although never explicitly stated, the Navy Board's policy on the procurement of cargo space on outward-bound merchant ships or chartered ships for a single voyage is made clear by a study of its minutes.[17] In essence the Commissioners of the Navy attempted to send as many troops and as much cargo as possible on outward-bound merchant ships under short-term space charters and short-term time charters to the Mediterranean, the West Indies, and Canada in order to release as much transport tonnage as possible for the support of the British Army in America.

Space charters, which called for payment for the amount of cargo on board a vessel, was not always satisfactory to shipowners, because these agreements did not take into account the time actually spent on a voyage. This was an important consideration because in war a ship might be forced to spend months on a passage which might otherwise take only weeks. The voyage of the ship *Brown Hall* is both illustrative and revealing. On 1 August 1775 the owners of the *Brown Hall* signed a charter calling for the ship to carry a load of naval stores from Deptford to Halifax at the rate of £5 5s per ton of cargo.[18] Loaded at Deptford and ordered to Spithead to join a convoy which was "not provided for by Charter party," the *Brown Hall* did not depart from Britain until late autumn because of delays in assembling the rest of the convoy, and she then encountered such adverse weather that she was forced to the West Indies. After spending months at Antigua waiting for escort, the *Brown Hall* finally arrived at Halifax and delivered her cargo in the summer of 1776. Her owners, who argued that because of the delays freight rates should be paid by the month instead of by the amount of cargo, insisted that the Navy Board owed them £2,000. The Board thought this amount too large, but conceded that the owners had a case and agreed, on 10 April 1777, to pay £1,200.[19]

The Navy Board and the shipowners could avoid the problems caused by delayed passages by hiring ships for a single outward-bound voyage for which the freight rate was paid by the month under a short-term time charter instead of according to the amount of cargo put on board.[20] But this type of agreement was the exception rather than the rule, and many shipowners insisted on the payment of demurrage for delays incurred while

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ing arrangements for the transport of troops to the Caribbean onboard West Indiamen, it appears from a study of the minutes of the Committee that this body was not officially involved in making these arrangements.

16. David Syrett, "The West India Merchants and the Conveyance of the King's Troops to the Caribbean, 1779-1782," *Journal of the Society for Army Historical Research* (Autumn, 1967), Vol. XLV, pp. 167-76.

17. PRO, ADM/106/2593-2611 passim.

18. William L. Clements Library, Shelburne Papers, Vol. 145, *Brown Hall*'s charter party, 1 August 1775.

19. PRO, ADM/106/2595, 10 April 1777.

20. E.g., PRO, ADM/106/2598, 27 July 1778; ADM/106/2599, 15 Jan. 1779.

carrying cargo at a flat rate for the amount of cargo on board the ship.[21]

On several occasions the Navy Board was forced by military necessity, as perceived by a secretary of state or a government department, to hire shipping to carry out a specific task. For example, in 1777 Germain directed the Navy Board to hire on a short-term charter the ship *Adamant* to carry military clothing to Canada.[22] The Treasury in 1781 ordered the Commissioners of the Navy to hire 10,000 tons of shipping from the firm of Mure, Son, and Atkinson under short-term time charters to transport oats to the British army at New York.[23] In neither case did the Navy Board approve the terms of the charter, but because it could not otherwise provide the ships it had no choice but to hire the required shipping. The Navy Board's specified needs for shipping at any particular time were made known to shipowners, brokers, and underwriters either by advertising in the London press, by word of mouth, or by posting notices in various gathering places—such as Lloyd's Coffee House—where merchants tended to congregate.[24] On 19 December 1778 the *Daily Advertiser* carried the following advertisement:

> The principal Officers and Commissioners of his Majesty's Navy do hereby give Notice, that they shall be ready to treat, on Monday the 4th of next Month, at Noon, for the Hire of TRANSPORTS for foreign service.

This advertisement appeared in every issue of the *Daily Advertiser* from 19 December 1778 to 4 January 1779, in ten issues of the *Morning Chronicle and London Advertiser* during the same period, and in every issue of the *Public Advertiser* from 19 December 1778 to 4 January 1779.[25] Such advertisements were obviously designed to secure ships for the Royal Navy, but as a by-product they also made it extremely difficult for a small group of merchants or ship brokers to monopolize the business of chartering shipping to the Navy Board. Monopolization was in any case impossible, for the Navy Board employed so many ships that no single broker or group of merchants could have possibly supplied all the tonnage required.[26]

After a ship had been tendered to the Navy Board to be chartered for use as a transport or victualler, the vessel had to be inspected, measured, appraised, and fitted out for service. Most ships chartered by the Navy Board for use as transports and victuallers were made ready for service at Deptford Dockyard, and when the Navy Board was in great need of additional shipping, it would pay freight to the owners of ships in the Out-Ports for the voyage to Deptford.[27] Upon arrival at Deptford Dockyard, a vessel was "surveyed by the master attendant, master shipwright and clerk of the survey at Deptford yard, and . . . hired and freighted on their report."[28] The first step taken to ascertain whether a ship was fit for employment was to inspect her timbers, planking, masts, yards and rigging. Such an inspection usually required that the ship be grounded out or placed upon ways so that the dockyard officers could determine the condition of the hull by drilling holes in her timbers and planking or by seeing how easily a sharp instrument could be inserted into various parts of the vessel. This is still the accepted method for testing the soundness of the hull of a wooden ship. In addition, because the Commissioners of the Navy opposed hiring any British ships built in the Netherlands, the officials at Deptford in 1776 rejected a number of vessels from that country.[29]

After the Deptford officers had found that a ship was structurally sound and had not been built in the Netherlands, they proceeded to measure her. Because the height between decks of a vessel was of great importance to the comfort and health of any troops embarked, the Navy Board did not wish to hire any ship that was less than four feet ten inches in height between decks. Several vessels were rejected because they did not meet this requirement.[30] As a general rule the Com-

21. E.g., PRO, ADM/106/2595, 30 June 1777.

22. David Syrett, "Lord George Germain and the Protection of Military Storeships, 1775-1778," *The Mariner's Mirror* (Nov. 1974), Vol. 60, pp. 395-405.

23. Syrett, *Shipping. . . .*, pp. 249-50.

24. E.g., PRO, ADM/106/2606, 7 Nov., 26 Dec. 1781; ADM/106/2609, 2 Aug. 1782.

25. *Daily Advertiser*, 19 Dec. 1778-4 Jan. 1779; *Morning Chronicle and London Advertiser*, 21 Dec. 1778-4 Jan. 1779; *Public Advertiser*, 19 Dec. 1778-4 Jan. 1779. Examples of the Navy Board's newspaper advertisements can be found in the British Library, Burney Collection of Newspapers, Vols. 662b-728b.

26. Cf. The disregard of patronage considerations in awarding contracts for military supplies during the Seven Years War. See Sir Lewis Namier, *The Structure of Politics at the Accession of George III* (London, 1957), pp. 45-58.

27. E.g., PRO, ADM/106/2602, 19, 20 April 1780.

28. Navy Records Society, *The Barham Papers*, Vol. II, p. 248.

29. E.g., PRO, ADM/106/2594, 31 Aug. 1776; ADM/106/2600, 10 May 1779; ADM/106/3402, p. 310; ADM/106/3403, pp. 1, 33; ADM/106/3404, pp. 84, 169, 184, 292-293; ADM/106/3318, f. 15.

30. PRO, ADM/106/3403, pp. 22, 184, 402; ADM/106/3404, p. 97.

missioners of the Navy did not hire any ships that measured less than 200 tons burden—a standard which was at times ignored when the shortage of shipping was particularly acute. In such instances the smaller vessels could be used as victuallers.[31]

Because the tonnage of a ship was the basis on which the Navy Board paid its owner, great care was given to determine it as accurately as possible. As one authority has noted, "There are few subjects which require more investigation than the tonnage of ships; for at present the mode of finding the tonnage of a ship is so replete with error, that a new method is required."[32] The tonnage of a ship is nothing more than its volume expressed in tons instead of cubic feet, but the difficulty arose from the fact that it was of necessity calculated by an arbitrary method. With "L" equalling the length and the "W" the width, the following formula was used by the Deptford Dockyard officers to ascertain the tonnage of a ship:

$$\frac{(L - 3/4W) \times W \times W/2}{94} = \text{tonnage}^{33}$$

However, the formula by which most "merchants and shipowners" of the time appear to have calculated the tonnage was to

> multiply the length of the keel by the breadth of the beam, and that product by half the breadth of the beam and divide the last product by 94; and the quotient will be the tonnage. Example, Suppose the ship's keel 72 feet, breadth of beam 24 feet, then

$$\frac{72 \times 24 \times 12}{94} = 220.6 \text{ [tons]}^{34}$$

The formula used by the Navy Board to ascertain a ship's tonnage produced a figure which was approximately eighty-one percent of the amount arrived at by the common formula. Accordingly, by modifying the formula in common use, the dockyard officers working for the Navy Board reduced by approximately one-fifth the amount of freight the Board was obliged to pay for each vessel.

31. PRO, ADM/106/2604, 29 Nov. 1780; ADM/106/2607, 11 Feb. 1782.

32. William Burney ed., *A New Universal Dictionary of the Marine . . .* (London, 1815), p. 569.

33. PRO, ADM/49/135, ff. 82, 113; ADM/95/95, pp. 164-65.

34. Burney, op. cit., pp. 568-69.

Once a vessel had been measured and inspected by the officers of the dockyards, it then had to be manned, stored, fitted out, and armed in accordance with the terms of its charter. These tasks were usually quickly completed, for, as the Deptford officers noted, "it is the owners' interest to get down & in Pay as early as possible [and] we presume there is not unnecessary delay."[35] The shipowners were obliged to supply their ships with all such equipment as sails, blocks, and anchors to make them seaworthy. They were also required to supply provisions for the ships' crews, but not those to be consumed by any troops which might be embarked. Owners were compelled to man their vessels at the rate of seven men per one hundred tons of ship's measured burden and to supply four cables of one hundred twenty fathoms each. On 24 May 1780, however, the Navy Board reduced the number of men required to six per one hundred tons and the number of cables from four to three.[36] Owners also had to arm their ships with 'at least six Carriage Guns of six pounders, or less bore as the Board shall think proper according to the size of the ship' and to provide twenty rounds of ammunition per gun.[37] On 29 November 1779 the Commissioners of the Navy modified this requirement 'to permit the owners of transports to fit them with carronades instead of common guns, taking care they are not less than 12 pounders.'[38] After 26 January 1776 the Board paid the owners of ships an allowance called "gun money" of £5 per gun in an effort to prevail upon the shipowners to arm their ships with more than six guns.[39]

One final step was needed before a vessel's acceptance by the Navy Board. When a ship was ready to enter into the pay of the Navy Board, her master or owner signified the fact to the dockyard officers who then had to reinspect the ship. If the ship passed this inspection, the dockyard officers sent a letter to the Navy Board stating that the ship was ready for service.[40]

When a ship entered into the service of the Navy Board as a chartered transport or victualler, the owner

35. PRO, ADM/106/3404, p. 134.

36. PRO, ADM/106/2603, 24 May 1780; William L. Clements Library, Shelburne Papers, Vol. 145, Item 110; Vol. 151, Navy Board to Admiralty, 30 Aug. 1780.

37. PRO, ADM/106/2596, 4 July, 3 Oct. 1777; ADM/106/3402, p. 315.

38. PRO, ADM/106/2601, 29 Nov. 1779.

39. E.g., PRO, ADM/106/279, 10 Sept. 1778; ADM/106/2597, 30 Jan. 1778; ADM/106/2600, 19 July 1779.

40. E.g., PRO, ADM/106/3318, f. 90.

surrendered all operational control over the vessel to the Royal Navy. The charters of ships hired by the Commissioners of the Navy to serve as transports and victuallers were very specific and stated:

> And by these presents doth grant, and to Hire and Freight lett the said Ship or Vessel to the said Commissioners to receive on board at such Port or Ports as shall be directed all such Soldiers, Horses, Women, Servants, Arms, Ammunition, Provisions and Stores as shall be ordered to be put on board her, and proceed therewith to such Port or Ports in North America as shall be required. And after having landed the said Soldiers, Horses, and Stores, to receive on board such others with their Baggage &c. as shall be put on board her, the proceed therewith as shall be directed.

The charters further stated:

> The said Master shall and will receive and take on Board the said Ship or Vessel, from Time to Time, such a Number of Soldiers, Horses, Provisions, Provender, and any Kind or Sort of Naval and Victualling Stores, Recruits, and whatever else there shall be Occasion for, for the Service of His Majesty, as shall be directed and required, as he can reasonably stow and carry; and shall and will therewith proceed, and sail to such Port, Place or Places, under Convoy, as the said Commissioners, or the Officer in Chief, whose Command he shall be under, shall order and direct, landing and delivering the same accordingly; and so from Time to Time, during her Continuance in the Said Service. In Performance of which, the said Master and his Men, with his Boats, shall be aiding and assisting to the utmost of their power.

After a ship had been chartered by the Navy Board, the owner was still responsible for keeping it fit for service and properly manned according to the terms of the charter.[41]

In addition to their other duties the officers of Deptford Dockyard appraised all vessels which were being chartered. The Navy Board then used these appraisals as the basis upon which it calculated the amount of money to be paid to shipowners whose vessels were taken or destroyed by the enemy. The hull of a ship was valued by the dockyard officers at a flat rate "per ton for the tonnage which she is paid freight for."[42] The dockyard officers also made a complete inventory of the ship's masts, yards, rigging, stores, equipment, and furniture. Every conceivable object to be found on the ship was assigned a value. Thus, after taking their inventory, the dockyard officers had merely to add up the estimated value of each item in the inventory and add this total to the value of the hull to assign an appraised value to the ship.[43] These appraisals were then sent to the Navy Board.[44]

When one considers the arbitrary methods employed by the dockyard officers, it is not surprising that many shipowners objected to the appraisals of their ships. Occasionally, at the request of an owner, the Board would order a second valuation.[45] In most cases the Commissioners of the Navy rejected the requests for revaluation,[46] but if an owner did manage to induce the Navy Board to order the dockyard officers to revalue his ship, it was unlikely that the original appraisal would be changed.[47] The refusal of dockyard officers to change the valuation of a ship is understandable, for it was they who made the first appraisal, and any departure from it would be an admission that they had made a mistake. The shipowners' wish to have their vessels appraised at the highest possible value is equally understandable, as these appraisals served as the basis upon which the Navy Board calculated the amount of compensation to be paid for ships lost through enemy action.

A significant advantage to the owner of a vessel chartered to the Navy Board was the guarantee of financial security. When a ship entered government service, she sailed *"at the Risque of Government from the Enemy."*[48] In other words, the Navy Board compensated the owners of chartered ships which were lost owing to enemy action. Payments, made in Navy Bills, were based on the valuation of the ship made at the time it entered the pay of the Navy Board. The Commissioners of the Navy then deducted from this valuation of all ships taken or destroyed by the enemy a sum to cover the "wear & tear," which a ship received from the day it was appraised to the day it was lost.[49] If a court-martial found that a ship had been lost to the enemy "through any Fault, or otherwise in the Master and the Ships Company . . . ," the owners did not re-

41. William L. Clements Library, Shelburne Papers, Vol. 145, Item 110.

42. PRO, ADM/49/125, 24 Oct. 1780; ADM/106/2605, 5 May 1781.

43. PRO, ADM/49/125, 24 Oct. 1780; ADM/106/3402, pp. 416-17.

44. E.g., PRO, ADM/106/3318, f. 93.

45. E.g., PRO, ADM/106/108 1B, 26 Feb. 1782; ADM/106/2607, 18 March 1782.

46. E.g., PRO, ADM/106/280, 16 Oct. 1779; ADM/106/2601, 16 Oct. 1779.

47. E.g., PRO, ADM/106/2606, 16, 19 Nov. 1781.

48. *The London Gazette*, 14 Oct. 1780.

49. PRO, ADM/49/135, f. 65; ADM/106/2594, 30 Oct. 1776; ADM/106/2604, 7 Oct. 1780.

ceive any compensation.[50] Further, any future rights to a ship taken by the enemy passed to the Crown after the owner had been compensated for his loss.[51]

The Navy Board not only paid compensation for ships lost because of enemy action, but also for ships requisitioned for the King's service. In December 1781, the Navy Board had to pay for the transport *Margery*, which had been requisitioned by Admiral Marriot Arbuthnot in America. Because Arbuthnot did not immediately report to the Navy Board the requisition of the *Margery*, her owners were given additional compensation as "an allowance for the interest of their property, from the time she ceased to be theirs until the claim is settled."[52]

Although the payment of compensation by the Navy Board for ships lost insured a shipowner's investment, it also deprived him of the opportunity to make an immediate profit. The freight rate of ships under long-term charter to the Commissioners of the Navy was paid by the Board at a fixed ratio per measured ton of the ship's burden per month of her employment. When a ship was under time charter to the Navy Board, her owners received payment for two months of freight for every four months of employment. When the ship was discharged from service and her accounts passed by the Navy Board, her owners then received the balance of the payment that had been withheld.[53]

By postponing the payment of part of the freight rate the Navy Board was able to insure that shipowners paid for the loss or misuse of the King's stores on board their ships. The meticulousity with which this provision was enforced is illustrated by the £7 6s deducted from the payment to the owners of the transport *Royal Britain* when it was discovered that eight pairs of stockings were lost from box No. 4396 while on board the vessel.[54] Of much greater importance was the provision that the Navy Board withheld payment for two months of every four months' freight to insure the good conduct of the shipowner, master, and crew. Each charter contained a sentence stating that "it is agreed by the said Parties, That upon loss of Time, Breach of Orders, or Neglect of Duty, but the said Master, being made appear, the said Commissioners shall have free Liberty, and be permitted to mulct, or make such abatement out of the Freight and Pay of said Ship or Vessel, as shall be by them adjudged fit and reasonable."[55]

When an official of the Navy Board discovered an act of abuse, neglect, or disobedience by the owner or master of a vessel under charter to the Commissioners of the Navy, the vessel in question would be "protested" against. The official had to go before a notary public and have a sworn statement setting forth the nature of the neglect drawn up and notarized. This statement was then transmitted to the Navy Board and served as the basis upon which the payment of the freight carried in the vessel in question was mulcted.[56] The ability to protest against and mulct the payment for freight of a vessel because of neglect of duty and nonperformance of the terms of its charter gave the Navy Board a powerful weapon for enforcing its commands.

The actual amount of the payment of freight by the Navy Board to each ship under charter depended on a variety of factors, almost all of which worked to the Board's disadvantage. In the first place, the number of ships available for charter became fewer and fewer as the war progressed. Second, inflation during the war drove up the cost to shipowners of such items as seamen's wages and naval stores. Third, the Navy Board not only had to compete with civilians for shipping, but also with the Board of Ordnance, the Navy's Victualling Board, and the firm of More, Son, and Atkinson, the Treasury's shipping agent, which before 1779 was responsible for the maritime transport of army provisions.

The Navy Board just could not go into the marketplace and pay whatever amount of money was needed to charter shipping whenever the strategic demands for transports and victuallers increased. This situation existed in large part because the Navy Board paid with Navy Bills for virtually all goods and services required by the Royal Navy, except provisions, ordnance, and seamen's wages. On 1 February 1780, Navy Bills to the value of £4,051,286 12s 7d were in circulation, and of this amount £950,571 16s 11d were spent on chartering transports and victuallers. In other words, approxi-

50. William L. Clements Library, Shelburne Papers, Vol. 145, Item 110.

51. E.g., David Syrett, "The Condemnation of the Privateer *Rising States*, 1777," *The Mariner's Mirror* (May 1970), Vol. 56, pp. 155-59.

52. National Maritime Museum, ADM/N/250, 29 Dec. 1781.

53. William L. Clements Library, Shelburne Papers, Vol. 151, Navy Board to Admiralty, 30 Aug. 1780; British Library, Add. MSS., 38343, ff. 7-8.

54. PRO, ADM/106/3529, 18 Nov. 1781.

55. William L. Clements Library, Shelburne Papers, Vol. 145, Item 110.

56. E.g., PRO, ADM/49/2, ff. 183-84.

mately twenty-three percent of the Navy Bills in circulation on 1 February 1780 represented expenditures for chartering transports and victuallers. If the Navy Board paid in the open market whatever was required to charter shipping, the number of Navy Bills in circulation would rise markedly causing a corresponding increase in the discount rate. This increase would, in turn, jeopardize the credit of the Royal Navy. As a consequence, the Navy Board raised freight rates only under heavy pressure and only enough to keep it competitive.[57] The law of supply and demand, as well as inflation, accounted for the fact that the freight rates paid by the Navy Board for chartering ships to serve as transports and victuallers inevitably increased during the American War. As the demands for shipping increased, so did the cost. In 1775, the Commissioners of the Navy were paying 9s per month per ton of a ship's measured burden.[58] By April 1776, reflecting the huge demand for shipping to transport the British forces to North America to combat the American rebels, the freight rate had risen to 12s 6d per month per ton.[59] During the remainder of the American War, the Navy Board's freight rate remained at approximately 12s per month per ton of a ship's measured burden. At various times the Navy Board sought ways to increase the amount of money paid by vessels under charter to it by other means than the actual raising of freight rates. On 10 March 1778, the Board introduced the policy of paying extra money to the owners of the ships which were armed with more guns than called for in their respective charters.[60] On 24 May 1780, the Navy Board lowered the number of seamen required of the owners to man their vessels from seven to six men per one hundred tons of the ship's burden. The savings to the owners in seamen's wages and provisions was calculated to give the shipowners a benefit equal to an increase of 1s per ton in the freight paid.[61] Concessions such as these, however, were limited in amount and scope, for they inevitably tended to reduce the seaworthiness of the ships under charter.

57. Syrett, *Shipping. . .*, pp. 87-90.

58. British Library, Add. MSS., 38343, f. 7.

59. William L. Clements Library, Shelburne Papers, Vol. 145, Prices and Tonnage of Transports hired by the Navy Board between 1 Nov. 1775 and 4 Nov. 1776, as sent to the Treasury [on] 10 March 1778.

60. PRO, ADM/106/2597, 10 March 1778.

61. PRO, ADM/106/2603, 24 May 1780; William L. Clements Library, Shelburne Papers, Vol. 151, Navy Board to Admiralty, 30 Aug. 1780.

During the last three years of the American War the Navy Board found it exceedingly difficult to charter additional ships at what it considered reasonable freight rates. Therefore, its only alternative was to refuse to discharge transports and victuallers from government service upon the return to Britain of such vessels. Instead, it invoked the clause in the ships' charters which gave the Navy Board the right to refuse to discharge a vessel and ordered shipowners upon the return of any of their vessels to Britain to repair and refit them for further service.[62]

The last three years of the war were understandably not profitable ones for the owners of ships detained by the Navy Board. While these ships earned a fixed rate of freight, the costs of naval stores and seamen's wages increased rapidly. The owners were often forced to invest large amounts of money in the maintenance of their ships, while inflation either reduced or destroyed their profits. The case of Ralph Elliot was not atypical. Owner of the transport *Polly,* he requested on 2 August 1782 that the Board increase the freight of his ship on the ground that in thirty-three months of employment the *Polly* had earned £4,198 16s 4d in freight and had cost him £5,583 5s 5d to maintain the vessel—a net loss of £1,384 8s 11d.[63] The records at the Public Record Office contain many other applications similar to Elliot's.

The relationship between the Navy Board and shipowners during the American War revealed a never-ending struggle between the quest for a military victory by the former and the desire for profits by the latter. The decision made in London at the beginning of 1776 to send a large army to the Western Hemisphere and to support that force both tactically and logistically required the British government for seven years to employ scores of ships to serve as transports and victuallers. When the entry of France into the conflict in 1778 changed a colonial rebellion into a world naval war, demands for merchant shipping to support British military operations greatly increased. But just when the military need for merchant shipping rose precipitously, the number of British merchant ships available to the Navy Board for chartering decreased. In part the change in the situation can be attributed to enemy action, but an even more important factor was the ina-

62. PRO, ADM/108/1C, 2 Aug. 1782.

63. E.g., ADM/108/1B, 24 July 1781.

bility of the Commissioners of the Navy to increase freight rates to match the increasing costs which had to be borne by merchant shipowners. The Navy Board's failure in the last years of the war to pay rates of freight that would offset the effects of inflation and give shipowners a margin of profit led to its inability to charter additional tonnage, while military necessity forced the Board to hold captive those ships already in its service under long-term time charters.

During the early years of the war, shipowners chartered ships on a long-term basis to the Navy Board not only because they wished to make a profit, but also to protect themselves against financial loss if the enemy seized or destroyed their vessels. Many shipowners were willing to accept a modest profit on their investment and even the harsh terms of the Navy Board's time charters in exchange for the British government's compensation for ships taken by the enemy. But from 1780 to 1783 shipowners were confronted by a different set of problems. A ship under a long-term time charter to the Navy Board, instead of earning a modest profit, could actually lose money because of inflation and the inability of the Commissioners of the Navy to pay higher freight rates.

Shipowners who contracted with the government to provide space on a merchant ship or even an entire ship for a single voyage were in a different position than those who had chartered their ships under long-term time charters. Chartering a ship for a single voyage to the Navy Board did not lock the shipowner into a commitment as did those with long-term charters. Merchant ships in the West Indian trade during the American War illustrate the advantages of the marriage of military requirements and the merchants' desire to make a profit. From 1778 until the end of the war the British government's stategy called for sending troops to the West Indies in ships which in peacetime sailed from Britain to the West Indies half empty. Therefore, the Navy Board could save badly needed shipping for other uses by sending troops to the West Indies on merchant ships, while the owners of these ships could make additional profits by carrying troops to the Sugar Islands. Those shipowners who rented cargo space for a single voyage to the Navy Board could in many cases impose their will on the Commissioners of the Navy by placing the whole transaction on a take-it-or-leave-it basis. They were, in short, in a position in which they could give the Navy Board three choices: send the cargo in one of their own ships; pay the going civilian freight rates; or not send the cargo at all. The East India Company, on the other hand, militarily and politically benefited from having the Royal Navy in the Indian Ocean and the King's troops in India, and the Company also usually had some empty cargo space on its outward-bound ships.

Whether it be the owners of ships that rented cargo space or their ships for a single voyage to the Navy Board or the owners of ships in the service of the Commissioners of the Navy under long-term time charters, the relationship between shipowners and the Navy Board during the American War was, as so often is the case in relations between governments and private entrepreneurs, a never-ending conflict between the desire for financial profit and the demands of the military.

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# Isaac Hull's Victory Revisited

Tyrone G. Martin, Commander, U.S. Navy (Ret.)

PUBLIC perception of newsworthy events and reactions to them are unpredictable commodities in this day and age of global electronic communications, so much so that concern for it forms an important part in the planning and conduct of modern politics. The Grenada invasion of 1983 is an obvious recent example. In our early Navy, when officers of all grades numbered fewer than flag officers alone today, and when advancement depended heavily on the active pursuit of "glory," public perception of important events had a more personal impact. In the War of 1812, Commodore John Rodgers came in for a mixed reception when his squadron's initial three-month cruise returned virtually empty-handed, even though it had operated in many areas in which the enemy should have been found. On the other hand, Commodore Stephen Decatur, who had gained public acclaim in 1803 by his admittedly daring raid into Tripoli to burn the captured American frigate *Philadelphia*, and by his 1812 defeat of HMS *Macedonian*, was hailed a hero when, in 1815, he surrendered the frigate *President* to a superior force after what many later-day historians have considered a half-hearted defense.[1] These two examples are hindsight. How did the victorious American captain handle publication of the news of our *first* frigate victory in that war?

The war had just entered its third month when, at a point due east of Cape Cod and south-southwest of Cape Race, two opposing frigates met in the type of duel which would characterize the conflict. There were no witnesses outside the antagonists. When it was done, the representative of the smaller, younger service had won; her enemy gone. The victor headed for Boston to spread the good news.

As he neared that port, on 28 August 1812, Captain Isaac Hull, commanding United States frigate *Constitution*, penned his report to Secretary of the Navy Paul Hamilton. Some 1,200 words long, it detailed, as would be expected, wind and sea conditions at the time of battle, the relative positions of the combatants when first sighted, an outline of the maneuvers involved prior to the close action, and an enumeration of damage inflicted, all set on a general time scale. Having thus summarized the action, he then identified his enemy, recounted casualties, commended his officers, and forwarded a list of prisoners.[2]

Two days later, now in port, Hull rewrote his report to Hamilton, reducing it to about 500 words. Gone was most of the tactical information he had recorded earlier, and emphasized was the brevity of the toe-to-toe phase of the action as he recalled it, and the damage wreaked upon his adversary.[3] That done, he forwarded *both* versions, but appended a note to the shorter one, saying,

> I have written you an account of the action in detail, but as it's my opinion that the less there is said about a brilliant act the better. I have therefore given you a short sketch which I would prefer having published to that in detail. I however leave it with you to do whatever you please with them.[4]

The Secretary was, not surprisingly, happy to comply with the captain's wishes. Hull's "short report" was published and republished across the land, and became the basis for the continuing popular legend of this battle.

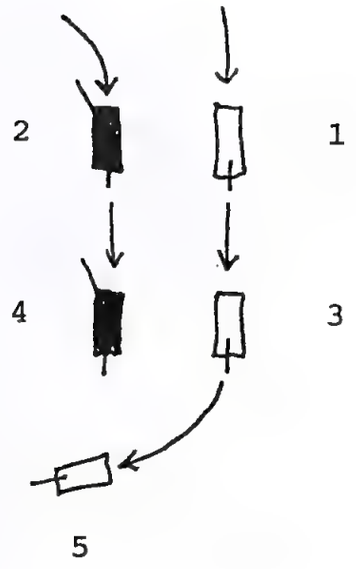
Hull was relieved as captain of *Constitution* on 15 September, in response to his request to be permitted to attend to the affairs of his recently deceased brother. He left Boston for New York and points south a few days later. Before departing, however, he engaged the

1. Bailey, Isaac. "American Naval Biography." Providence, RI: the author. 1815.

2. Captain's Letters to the Secretary of the Navy, RG 45, National Archives.

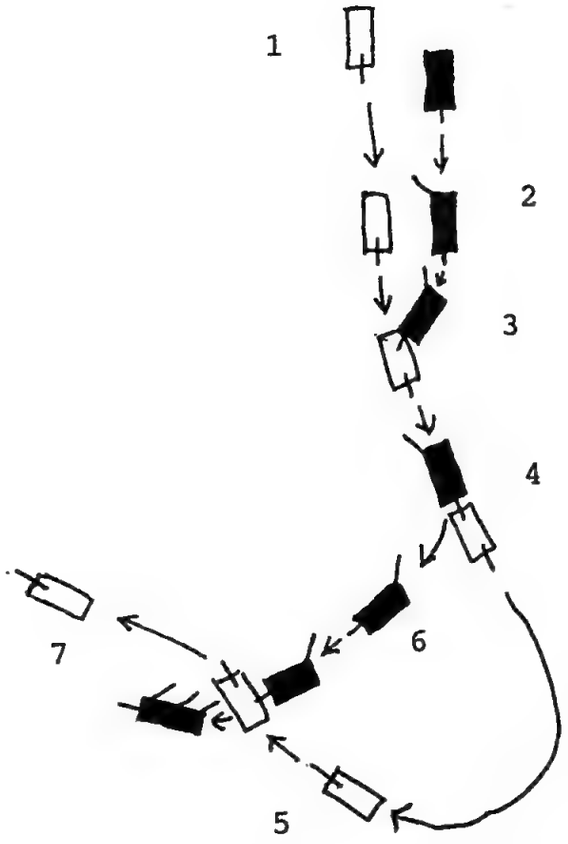
3. Ibid.

4. Ibid.




Close-in phase of action as sketched by Hull in 1821. His comments:

1. The *Constitution* alongside the *Guerriere*, first opens her fire and shoots away her mizzen mast.
2. Alongside *Constitution*—looses [*sic*] her mizzen mast.
3. The *Constitution* alongside the *Guerriere* & to windward, close fighting.
4. *Constitution* attempts to lay her aboard the Larboard Bow but shoots ahead and crosses her bow—immediately after her fore and main masts fall.
5. *Constitution*, in endeavoring to lay her aboard on the Larboard Bow, shoots ahead and crosses her bow immediately after her fore and main masts fell by the board.




Reconstruction of close-in phase.

1. *Constitution* overlaps *Guerriere*'s quarter; opens fire.
2. *Guerriere*'s mizzen mast falls.
3. *Guerriere* collides with *Constitution*, snagging larboard mizzen shrouds.
4. *Guerriere* pivots astern before breaking free.
5. *Constitution* somehow takes position on *Guerriere*'s bow; fires at least 2 broadsides.
6. Ships collide as *Constitution* attempts to lay *Guerriere* aboard; the latter's bowsprit snags the starboard mizzen shrouds.
7. *Constitution* pulls away, the whipping of her bowsprit causing the collapse of *Guerriere*'s fore and main masts.

well-known marine artist Michel Felice Cornè to paint a series of four pictures depicting significant moments in the recent engagement. He also arranged for Purser Thomas Chew, who had transferred from duty in the ship to the Boston Navy Yard, to act as his agent in overseeing the progress of Cornè's work and ensuring it was accomplished in accordance with his wishes.

The development of these paintings did not go

smoothly. Hull was not happy with the artist's pace, wishing to have them done and available to be copied for lithographs as soon as possible. He also had problems getting the details as he wanted them, even writing Chew in October that the Purser had an incorrect memory as to the relative positions of the ships as the climactic phase began.[5] Difficulties were resolved in a relatively short time and the set was finished around year's end. The four views show (1) the antagonists approaching each other, (2) *Constitution* alongside to *Guerriere's* port as the latter's mizzen mast goes by the board, (3) *Constitution* in position across *Guerriere's* bow as the latter's fore and main masts go by the board, and (4) *Guerriere* blowing up. Cornè himself made a second set, and any number of lithographs were copied from them by others and widely sold, the second of the four views being the most popular. It even appears on the presentation sword Hull was awarded by his home state of Connecticut.

Isaac Hull, as the winning captain, understandably was the center of attention. And, as it turned out, the American public barely had time to get its collective breath before there was another, and yet another, naval victory to crow about. Hull's triumph was the first of a series, and so soon faded into the comfortable background of a rosy picture, never to be given critical consideration of its details. A number of other participants have left written records of what they saw, did, and remembered. On the American side, they include First Lieutenant Charles Morris,[6] Surgeon Amos A. Evans,[7] Midshipmen Frederick Baury[8] and Henry Gilliam,[9] and Gun Captain Moses Smith.[10] The British point of view is to be found in the testimony of Captain James Richard Dacres, First Lieutenant Bartholomew Kent, and Sailing Master Robert Scott, as given in the record of the captain's court-martial at Halifax in October 1812.[11] Taken together, they provide a more detailed record of what was a less lopsided and swift, though nonetheless decisive, victory for Captain Hull and his crew.

Among the Americans leaving a record, Captain Hull and First Lieutenant Morris were on the quarterdeck throughout the battle. In addition to the two battle reports previously cited, Hull also wrote a letter to Professor Benjamin Silliman at Yale nearly a decade later addressing certain points and providing a sketch of the ships' movements during the battle.[12] Lieutenant Morris' autobiography was written decades after the fact and offers little beyond the official reports. Midshipman Baury probably was on the quarterdeck, too, for it is known that that was his battle station during the *Java* battle just four months later. Midshipman Gilliam was in charge of the Mizzen Top and Moses Smith says he was at Number 1 gun on the gun deck. Surgeon Evans was in the cockpit, deep in the bowels of the ship, throughout the battle; other than the sounds of gunfire and collision, much of his information must have come from post-battle conversations with those closer to the action. Baury, Gilliam, and Evans all penned their descriptions within thirty days of the event. Smith's record, like Morris', was written years later, but putting aside its breezy style, his statements are borne out, almost without exception, by one or more of the other accounts.

All of the British eyewitnesses were on *Guerriere's* quarterdeck throughout most of the action. Their duties made them the three most knowledgeable people as regards the sequence of tactical and material events on the other side. Their testimony was recorded approximately seven weeks after the event.

Now to the battle as it was recorded by these participants.

At noon on 19 August 1812 in that area south of the Gulf of Saint Lawrence, there was a fresh breeze blowing from slightly west of north and it was to persist throughout the battle to come. The sky was partly to mostly cloudy and a choppy sea was running, whose troughs extended generally north-south. *Constitution* was moving to the south-southwest at about six knots, on the alert for an English frigate reported to be in the

5. Letter, Captain Isaac Hull to Purser Thomas J. Chew, ? October 1812. William L. Clements Library, University of Michigan.

6. Morris, Commodore Charles. "Autobiography." U.S. Naval Institute *Proceedings*, Vol. VI, No. 12 (1880), pp. 163-67.

7. Evans, Surgeon Amos A. "Journal Kept On Board the Frigate Constitution, 1812." Reprinted for William D. Sawtell, Lincoln, MA, 1967, pp. 374-75.

8. Journal of Midshipman Frederick Baury, 24 June-26 October 1812. Massachusetts Historical Society.

9. Howes, Mrs. Lilla M., ed. "Letters of Henry Gilliam, 1809-1817." *The Georgia Historical Quarterly*, Vol. XXXVIII, No. 1 (March 1954), pp. 59-61.

10. Smith, Moses. "Naval Scenes in the Last War." Boston: Gleason's Publishing Hall, 1846, pp. 30-36.

11. Record of Court Martial of Captain Richard R. Dacres, RN. PRO. ADM 1/5431.

12. Letter, Captain Isaac Hull to Professor Benjamin Silliman, 29 October 1821. Yale University.

area. A ship was sighted on the port bow, heading roughly in a west-southwesterly direction with her starboard tacks on board. Captain Hull, Surgeon Evans, and the three English witnesses all reported it was 2:00 P.M. Both ships went in chase immediately and, according to Hull, closed quickly. At 3:00 the English identified their contact as a frigate, and by 4:00 were sure it was *Constitution,* which they had chased unsuccessfully a month earlier. During the latter part of this same hour, the Americans recognized their target as a frigate. At about this time (3:45), Hull said the Englishman backed his main topsail to the mast and awaited his foe, and that he responded by reducing to fighting sail, clearing for action, and beating to quarters.

Hull reported that at 5:00 he bore up a little to place his opponent a little on his starboard bow, and that five minutes later the Englishman hoisted three ensigns and fired her starboard broadside at *Constitution.* The English said they opened fire at 4:10 at the range of about a mile. The Americans reported that all shots of this first broadside fell short, but that two shots of the larboard broadside which followed struck their hull while the remainder flew over and through the rigging. As the English continued to alternate broadsides, Hull hoisted his colors and responded with his bow guns as he yawed from side to side to throw off the British aim. The Englishman said Hull began firing at 4:20. Thereafter, Dacres wore several times, interpreting Hull's yawing maneuvers to be attempts to gain a raking position on him. Finally, after "about 3/4 of an hour," according to Hull's reports, the Englishman "bore up with the wind rather on his Larboard quarter," on a course roughly to the southeastward. Midshipman Baury, whose journal largely copies the ship's log, wrote that this occurred at 5:45. *Constitution's* main topgallant was set, and she bore down on *Guerriere.*

As *Constitution* gained on *Guerriere,* she steered a slightly convergent course, so that she moved from a position about 200 yards from the Englishman's wake to one less than fifty yards off when she was overlapping *Guerriere's* quarter and opened fire with cannon double-shotted with ball and grape. Captain Hull reported that he opened this close fire at 6:05 in his 28 August letter and at 5:55 in the one he wrote two days later. Lieutenant Morris and Midshipman Baury support the former time, while Surgeon Evans said six o'clock. The three British participants place it at *five* o'clock.

Neither of Hull's reports specify which side of *Guerriere* he closed in on. The second of the Cornè paintings shows him to have had it portray him to larboard, a point about which he and his purser differed, as noted earlier. Captain Dacres and Sailing Master Scott testified the American took the *starboard* position, and this is inferred in Midshipman Gilliam's letter. Lieutenant Kent's testimony records him as having testified that the American was to "larboard," but as all of his other testimony agrees with his fellow countrymen, it is believed the court clerk erred. In any event, later occurrences favor *Constitution* having come up on *Guerriere's* starboard side and therefore, precisely speaking, having given up the weather gauge.

Throughout this phase of the battle, *Constitution* was moving slowly ahead on *Guerriere's* beam at the range of about a "half pistol shot." The English fire generally was higher than the American, sundering running rigging and damaging spars, while the American shot peppered the British hull and chewed up bulwarks as a multitude of Yankee musket-wielders laid down a galling fire on exposed English tars. After some fifteen to twenty minutes, *Guerriere's* mizzenmast was shot away. All of the participants who recorded the event agree on the elapsed time and the fact that the mast went over *Guerriere's* starboard quarter. The Englishmen also reported that the mast plunged, then shot up to punch a hole in the ship's starboard counter, where it remained impaled, acting like a sea anchor.

Reaction to this catastrophe was swift, so swift that the participants had difficulty describing it. Hull tried feebly in his first report and deleted it in the second—and, in any event, indicated that everything occurring from this point on did so in fifteen minutes. The sequence of events below has been pieced together from statements made by one or more of the parties from both sides, but never by all of them. The English time frame is used because, as will become obvious, Hull's fifteen minutes is totally inadequate.

With the fall of *Guerriere's* mizzen at 5:20, her forward motion slowed and the dragging mast caused her head to fall off toward *Constitution* as the latter drew ahead more quickly than before. Hull, seeing he was moving ahead, sought to come to port to rake *Guerriere,* but sundered braces prevented his crew from handling the sails smartly enough. Simultaneously, Dacres, who found his rudder could not offset the effect of the dragging mast, tried to increase his turning rate so as

to get in at least one raking broadside at *Constitution*'s stern at short range. Had he been successful, he might have at least equalized damages. Unfortunately for him, *Constitution* was not moving ahead as swiftly as he thought, his ship spun faster than was wanted in the small distance then separating the antagonists, and *Guerriere*'s jib boom and bowsprit plunged into *Constitution*'s larboard mizzen rigging and became snagged. The American's quarter boat in the davits there was smashed. *Constitution* continued to move forward through the water and *Guerriere* soon swung to a position astern, repeatedly surging against *Constitution*'s hull and wrecking the captain's gig in the stern davits before dropping free.

It appears that something of a lull occurred in the engagement at this point. The Englishman was preoccupied with trying to rid himself of the dragging wreck and restore some semblance of fighting order to his ship. Hull had just found his maneuvering capability impaired and probably was having to "regroup" his thinking as a result. From the reports available, he next was in a position off *Guerriere*'s larboard bow from whence he fired at least two broadsides at her while she could answer only with a couple of her forwardmost guns. How he arrived there—whether by wearing round or by backing sails to the mast—is not indicated.

At about 5:40 (English time), Hull began maneuvering to take up a raking position across *Guerriere*'s bow. Dacres, who had been working frantically to regain some degree of mobility and control, still was encumbered by the dragging mizzen wreckage. Seeing what Hull was about, he put his helm up in an attempt to swing his ship parallel to the American's course and reduce his vulnerability. Shortly thereafter, apparently as the result of this move and perhaps because of sail-handling problems in *Constitution* or a misjudgment of the relative motion between the combatants by Hull, the two collided once again. This time, *Guerriere*'s jib boom and bowsprit fouled in *Constitution*'s starboard mizzen shrouds. (One or both of these collisions was responsible for the destruction of *Constitution*'s cross-jack yard and spanker gaff and boom.) Marine Lieutenant William S. Bush, who leaped to the rail near the offending bowsprit to lead the defense against boarders, was killed instantly by a British musket ball in the head. First Lieutenant Charles Morris then leaped into the same position intending to lash the bowsprit fast and board the Englishman. He fell, shot through the abdomen.

The English captain *had* decided to attempt boarding and ordered up men from the gun deck to augment those available on the forecastle in the attempt. Before it could take place, however, the heavy musketry coming from the Americans wounded Dacres and Sailing Master Scott, and greatly inhibited the assembly of the party. The opportunity passed when, at about 6:00, the combination of wind and sea pulled the ships apart. As it came clear of *Constitution*'s shrouds, *Guerriere*'s jib boom whipped, sending shock waves into a foremast wounded by shot and with little remaining standing rigging. It swayed, tottered, and then fell to starboard, snapping off the jib boom as it crashed. The dropping mast came down across the mainstay, which, in turn, sent shock waves into the main mast—a stick known to need replacement and also with much of its standing rigging gone. By 6:20, it, too, had fallen to starboard, leaving the British frigate a sitting duck with its entire starboard battery smothered in wreckage.

Seeing his enemy thus immobilized, Hull drew off to the east, probably to keep his foe silhouetted against a setting sun, while he spent some time rereeving shot-torn braces and otherwise restoring his sail-handling capabilities before resuming the action. Dacres and his people used this time to try and give *Guerriere* some small measure of mobility so her guns at least could be brought to bear on a more agile enemy, but even the spritsail yard carried away when they set a sail to it. Wreckage cleared, but without any sail power, she rolled miserably in the trough, some of her guns careering loose about the gun deck, spreading terror and death in an already badly battered crew. Seeing *Constitution* moving once more into a raking position about a half hour after the fall of the mainmast (according to Hull), Dacres ordered his flag struck from the stump of the mizzen. Sailing Master Scott placed the time at 6:45. Lieutenant Morris later wrote that it occurred "a little before sunset," which the U.S. Naval Observatory places at 6:57.[13]

Captain Hull appended enclosures to each of his reports to the Secretary detailing the damages suffered by *Constitution*. These cannot be found today. He made only the briefest allusion to them in the body of the longer report, summed up by saying the ship was ready

13. Letter, U.S. Naval Observatory to author, 9 August 1984.

for action again in two hours, but he deleted even this observation from the later, widely published, one. A survey of the ship's log for the days following the engagement, supplemented by the observations of the participants, principally Baury, Gilliam, and Smith, shows that the big American frigate had taken shot through both her fore and main masts, which led to their being fished and woolded. Braces and jib halyards had been shot away in the first ten minutes of the close action, and other standing and running rigging was "much cut," as were the sails. The crossjack yard had been broken and the spanker gaff and boom destroyed, as mentioned earlier. The band for the main chains had been broken; the chains for the main topsail yard shot away. The fore topgallant mast had been shot through the heel and the truck at its head was gone. Damages not affecting maneuverability included the loss of the two boats, injury to the taffrail, and a small fire in Hull's day cabin caused by fire from the British bow guns at close range.[14,15] While the ship may have been basically ready to defend herself again in two hours, much of the trip home was spent in effecting repairs, and she certainly was in no condition to continue a war cruise. (Replacement of both fore and main masts was a priority effort under Bainbridge before he took her out of Boston in October.)

The majority of participants on both sides are in essential agreement as to the overall duration of the incident: from the 2:00 sighting of each other to the 6:45 striking of *Guerriere*'s colors. Why, then, does Hull's version, in effect, lengthen the opening phase and abbreviate the critical action?

Both sides give evidence of having been eager to engage the other, and report how quickly they closed to something approaching maximum long-gun range. If one assumes that ten miles is a reasonable sighting range on a cloudy day with the sun near its zenith, and given the recorded speeds of six to seven knots for *Constitution* and five to six for *Guerriere* at this time, then the elapsed hour and ten minutes between identification of a warship and opening salvo at the range of about a mile stated by the British is more comprehensible than Hull's two hours and five minutes. Hull says the Englishman backed his main sail to the mast and awaited him, then infers that he (Hull) took nearly an hour to get ready and pick the moment to strike. Dacres and his people indicate that the two sides went at it in journeyman fashion. Neither side reported any maneuvering by the other until fire was opened. Given the eagerness which each allegedly had for a fight, it begs credulity that Dacres would have just sat there waiting for Hull to get all ready, especially since he not only knew he was facing an American but had specifically identified the ship that had embarrassed him and his colleagues by escaping their trap the month before.

As for Hull's statements that the close action lasted thirty minutes, one must consider them in relation not only to the sequence of events but to the reported ammunition expenditure by *Constitution*. This appears in Moses Smith's recollection and is said to have been taken from the ship's log. According to this source, she fired 953 rounds of all kinds. If we delete the ten 18-pounder shot as having been used earlier in the action by the bow chasers, and if we assume that the 260 stands of grape all were used in double-shotted loads, we still are left with 683 rounds to be fired by twenty-seven guns (*Constitution*'s broadside at this time) in a half-hour. This equates to each of those guns firing once every minute and eleven seconds, an incredible sustained rate of fire for gun crews in their first battle. Even if we also assume that the 100 rounds of canister likewise were expended in double shots, the rate of fire remains a surprising minute and twenty-three seconds between rounds. It must be recognized, too, that there were some periods when fire slackened or stopped altogether because of the maneuvering of the ships.

Where is the truth? When one couples the careful approach reported by Hull with his abbreviation of what followed, one gets the impression of an underdog boxer cautiously and patiently waiting for his favored opponent to give him an opening, at which time the underdog daringly strikes home and wins. Or, if we return to the images of 1812, the brave and young Yankee Tar getting in a lick on the proud and vain John Bull. Good press. But the British version rings truer.

In neither of his reports did Isaac Hull state specifically which side to he closed on *Guerriere*. In the second of the Cornè paintings, he is shown starboard side to—a point about which he and Purser Chew disagreed—and he also indicated the same position in the 1821 letter alluded to earlier, and in the sketch he ap-

14. Log, USS *Constitution*, 1-29 August 1812 (specifically, the remarks for 20 through 24 August). Henry E. Huntington Library and Art Gallery.

15. Letter, Lieutenant Alexander S. Wadsworth to Stephen Longfellow, 31 August 1812. MS 67-497-1. Maine Historical Society.

pended thereto. The problem with this position becomes apparent when trying to understand what happened immediately after *Guerriere*'s mizzen fell. Everyone, including Hull, agreed that it fell to starboard. The wreckage was not cleared until after Hull drew clear for some quick repairs. If *Constitution* had been starboard side to *Guerriere*, i.e., on her left relative to the line of advance, *Guerriere*'s head would have been pulled *away* from her foe, and would have left him trying to catch up from a position on the outside of a turn. Had this been the case, how could the American frigate, with its severed braces, have gotten around into a raking position, as shown in Cornè's third painting, and caused the loss of the Britisher's other two masts in the fifteen minutes Hull said elapsed? The answer is that it couldn't have, especially when one realizes that the ships were under fighting sails and had even those sails "much cut up," indicating a low speed of advance—two to four knots in *Constitution*'s log. Did Hull's memory fail him on this point? Or did he intentionally modify the facts to avoid the criticism—however picayune, with the wind nearly dead aft—of having given up the weather gauge?

Hull had been denied merited recognition for a daring deed during the Quasi-War with France in 1800, he had been the last of four officers commissioned as Lieutenants in early March 1798 to attain his post captaincy (in 1806), and he had seen juniors promoted ahead of him by political rather than professional action. One might make a case for his doing everything possible to insure his fair share of glory for this, his "brilliant act."

(When William Bainbridge reported leading *Constitution* to victory over HMS *Java* four months later, he, too, painted his actions in the rosiest terms and minimized the damage his ship had suffered. Furthermore, that officer is known to have sought the professional ruination of at least three of his contemporaries: Captain Charles Stewart [1814], Commodore Stephen Decatur [1820], and Isaac Hull [1822].[16] In the first instance, he took direct action by urging the Secretary of the Navy, his friend William Jones, to order a court of inquiry into Stewart's conduct. Stewart was exonerated. Bainbridge worked through surrogates in the other two cases. Decatur was killed in a duel by Commodore James Barron; Hull was exonerated in a court martial concerned with his performance of the Boston Navy Yard. Seeking glory was considered a proper—and perhaps the primary—aspiration of a naval officer in those days; pursuing professional preferment ran a close second.)

Having noted *Guerriere*'s loss of her mizzen, Isaac Hull proceeded to summarize the remainder of the action by saying he got in a raking position ahead and, fifteen minutes after the mizzen dropped, the Britisher lost her other two masts. No cause given for the near-simultaneous dropping of those masts, an event worthy of praise under the right conditions. No mention, either, of the two collisions. Why? And why no description of how he came to that raking position off *Guerriere*'s bow between the collisions? If Hull was sensitive to criticism, he might have wished to avoid anyone observing that the first crunch occurred because he wasn't alert enough to get out of the way of a crippled enemy. And if the dramatic dropping of *Guerriere*'s mizzen and what followed had left Hull startled and not quite in complete control, which would not have been unusual for anyone in the circumstance of his first ship-to-ship battle as commander, he might actually have been slow ordering subsequent maneuvers and perhaps had come about in a complete circle to port to gain that position on *Guerriere*'s larboard bow. It might have been more than he could admit to. And the same could be said for the second collision, for it occurred against a nearly stationary ship and infers that Hull may have misjudged his maneuver. He *did* tell the Secretary he thought the less said the better about a "brilliant act."

One would have to say that Isaac Hull was victorious both over the British frigate *Guerriere* and in attaining every benefit from his success. The United States received an important and badly needed boost in national pride. The ship acquired its famous nickname, "Old Ironsides." Generations of American youth have been thrilled by the captain's account of a swift, lopsided victory. The *whole* story is no less thrilling, and, after more than 170 years, ought to be made public. The American crew was green and few, if any, ever had been in a ship-to-ship action: Hull hadn't. They made mistakes and didn't operate with the kind of efficiency ex-

16. Long, David F. "Ready to Hazard." Hanover, NH: University Press of New England, 1981, chapters 12 and 14, for the Decatur and Hull affairs. Bainbridge's action against Stewart is to be found in Secretary of the Navy Letters to Commandants and corresponding Captain's Letters to the Secretary for the period April-May 1814, RG 45, National Archives.

pected of an established crew (the British estimated that they fired four times for every three American blasts). Yet they fought like demons and were lucky—and won. That's worth remembering. But so is the fact that the larger American ship was capable of absorbing more damage without significant detriment, e.g., the two wounded masts continued to serve. It's also worth remembering the heads-up reaction of Dacres when he tried to turn the disaster of the mizzen's loss into a devastating rake of his enemy's vulnerable stern, recognizing that his enterprise failed only by the narrowest of margins.

*Tyrone G. Martin was fifty-eighth commander of USS* Constitution, *overseeing the frigate's latest restoration and leading her through the events of our Bicentennial. He formulated the policy that continues to guide her historical restoration and was a major contributor to the artisans' manual which guides day-to-day maintenance. His award-winning* A Most Fortunate Ship *is considered by many to be the definitive work on "Old Ironsides."*

# The South Carolina Frigate: A History of the U.S. Ship *John Adams*

W. M. P. Dunne

It was the biggest celebration held in Charleston, South Carolina, since Pres. George Washington visited there in May 1791. "An immense number of spectators attended in spite of the distance of over 3 miles from the city";[1] they came over land and water on an early June morning in 1799 to watch the new frigate *John Adams* slide down the ways into Shipyard Creek. At 8 A.M. the launching began, the vessel "moved with great velocity toward the water,"[2] but then she shuddered to a stop as the building ways settled into the soft ground of Shipyard Neck, the peninsula between the creek and the Cooper River, where the yard was located.

Two days later, on the 5th of June, the builders tried again and this time

> the frigate *John Adams* was launched happily at 8 o'clock this morning, introduced into her element, with a rapid but beautiful movement. She hurried from off her ways before a number of shores and blocks could be knocked away, and while a number of workmen, nine it is said, were still under her. . . . A profuse and elegant collation, enough for 500, was provided by the Committee of Subscribers as a social offering to their fellow citizens—Governor Edward Rutledge, Major General Charles Cotesworth Pinckney, Brigadier General William Washington, Colonel Read . . . attended . . . 16 toasts enumerated plus volunteers, including a band playing favorite federal tunes.[3]

Both the frigate and the workmen survived the occasion and *John Adams* began an illustrious sixty-eight-year career in the United States Sailing Navy. The difficulty with the launching, however, might better have been seen as a bad omen for her birthplace. Three score and six years later, during the dying days of the Civil War, she would enter Charleston Harbor as an enemy to enjoy a bittersweet victory; while she sailed past the familiar sights of Rebellion Roads, Shute's Folly and the Battery, Federal forces poured across the rivers and took possession of the prostrated city of her birth.[4]

The Charleston-built warship had a chameleonlike career during her first thirty years of naval service: launched as a frigate, converted to a corvette, and finally changed again to a jackass frigate before suffering a major rebuild at Norfolk Navy Yard in which nearly all of her wood, except the original South Carolina live oak frame timbers, was replaced. She emerged from this remodelling as a 2nd Class sloop-of-war and retained that configuration until she was sold out of the navy at Boston in October 1867.

*John Adams* was built by subscription of the citizens of Charleston, the fourth largest shipping port in the United States, under an Act of Congress dated 30 June 1798. The subscribers pledged to pay for the vessel on behalf of the federal government under the following terms:

> payments to be made either in negotiable notes dated 13th Inst., payable 1/2 in 4 months, 1/2 in 6 months or in cash.[5]

The cash discount was set at 6 percent. Patriotically and financially, *John Adams*, the seventh of nine subscription vessels built at East Coast ports during the French crisis,[6] was a sound investment for the Charlestonians.

The city, in common with the rest of the United

1. *S.C. Gazette & Timothy's Daily Advertiser*, 6 June 1799.
2. *Charleston City Gazette & Daily Advertiser*, 4 June 1799.
3. *S.C. State Gazette & Timothy's Daily Advertiser*, 6 June 1799.
4. J. McNeil, *Charleston's Navy Yard* (Charleston, S.C.: Naval Civilian Administrators Association, 1985), p. 24.
5. *Charleston City Gazette & Daily Advertiser*, 2 November 1798.
6. F. C. Leiner, "The Subscription Warships of 1798," *American Neptune*, XLVI (no. 3, 1986), 141-58.

(Courtesy of the Maryland Historical Society.)

States, was in the throes of preparing for a war with France. Fort Mechanic was completed at what is now known as the Battery and Fort Pinckney was constructed in the harbor on nearby Shute's Folly Island. When news of the Congressional action authorizing the subscription warships reached the city late in July, a meeting was held in William's Long Room to raise money for the construction of a twenty-gun sloop-of-war. A citizens' committee was appointed under the leadership of William Crafts, who was joined by such prominent individuals as Adam Gilchrist, Thomas Morris, David Alexander, Robert Hazlehurst, Adam Tunno, and James Miller.[7] By 4 August, $100,000 had been raised and on the 13th the committee announced its decision to build a frigate instead of a sloop:

> it was resolved to build and equip a vessel of war of not less burthen than 550 tons, to carry 24 guns on the main deck.[8]

Henry Laurens and Nathaniel Russell joined Morris, Crafts & Tunno of the original fund-raising group and the five were appointed "to carry into effect the subscribers views."[9] The Charleston committee had originally requested that their ship be named the *Adams*, but they were informed by Secretary of the Navy Benjamin Stoddert that the name had already been assigned to another light frigate building at New York City and as a distinction "it will be proper to have the Charleston Ship named the *John Adams*."[10] The secretary's suggestion appeared logical at the time but it

7. *S.C. State Gazette & Timothy's Daily Advertiser*, 28 July 1798.

8. Op. cit., 14 August 1798.

9. Ibid.

10. Capt. D. W. Knox, U.S.N. (Ret.), ed., *Naval Documents Related to the Quasi-War Between the United States and France*, vol. 2 (Washington: Government Printing Office, 1936), 289.

has since led to endless confusion among naval historians as the two ships, similar in both name and rate, served simultaneously through the Quasi-War and the Barbary Wars.[11]

The specifications of the ship were prepared by Assistant Naval Constructor Josiah Fox in Philadelphia,[12] but altered substantially upon their arrival at Charleston, both in length of keel and degree of deadrise, by Master Builder Paul Pritchard.[13] The frigate's frames were constructed of part Carolina live oak (the futtocks) and part low-country cedar (the top timbers). The keel and kelson were fashioned from Carolina pine and her masts and spars were of knot-free, long-leaf pine, also from local forests. The deck beams were shaped from yellow pine logs hewn along the Edisto River and the knees supporting them were formed from Carolina live oak.[14]

More than thirty shipwrights were hired from the shipbuilding communities of northeastern Massachusetts to expedite construction,[15] and the keel was laid on 10 November, a week before Pritchard launched the Revenue Cutter *South-Carolina* from the same yard.[16] James Marsh, who Pritchard had hired as construction foreman, and Capt. George Cross, a South Carolinian who was appointed as construction superintendent by the Navy Department, had also arrived at the yard to assume their duties by this time.

Ship construction consisted largely of manual labor aided by block and tackle, simple wooden machines, and basic hand tools. It was best accomplished in the Charleston low-country during the cooler months. Vessels were built out in the open, exposed to the weather to season the live oak framing and other structural members of the hull. Logs were stored in a pond at the shipyard to keep them sound and resilient until needed. The timbers were cut by sawyers, working one up and one down in a sawpit, and shaped by shipwrights using broadaxes and adzes. The ship's planking was fastened with wooden pegs called treenails that were pounded by mallets into holes bored with augers. *John Adams*'s keel pieces, frame futtocks, and top timbers were joined by bolts of iron.

> This Ship was contemplated to have been copper bolted, but no copper bolts could be had at that time, & the incapacity of only one Brass Founder here (at that time) to cast composition bolts, it was abandoned & the Ship was bolted with Iron throughout & her Plank put on with composition spikes & treenails.[17]

Tons of oakum were used to caulk her seams and hundreds of sheets of copper were fastened below the waterline to protect her hull from the destructive attacks of the teredo navalis (shipworm), and also to reduce the accumulation of barnacles and other marine growth. *John Adams*'s figurehead, a bust of President Adams, was sculpted by William Rush of Philadelphia,[18] America's leading ship-carver. Local artisans completed the trailboards, quarter galleries, transom, and other carvings.

In Charleston, much of the construction work was done by slaves and this, supposedly, was the cause of *John Adams* becoming the U.S. Navy's infamous "two-sided frigate." It is generally believed that the crew of slaves shaping the starboard side frames worked to a different dimension than those constructing port side ones. The oddity was substantiated ten years later when Josiah Fox measured the ship at Washington Navy Yard and found,

> From an unknown cause she is wider on the Larboard than Starboard Side, and always tends to list to Starboard, from

11. H. I. Chapelle failed to note the *John Adams* in his summary list of American naval vessels in commission at the beginning of the War of 1812, "The Ships of the American Navy in the War of 1812," *Mariner's Mirror*, XVIII (no. 3, 1932), 287-302. Theodore Roosevelt, writing in 1882, was aware that there were two different ships bearing President Adams's name but was confused concerning which one had the asymmetrical hull. *The Naval War of 1812* (New York: G. P. Putnam's Sons, 1882), p. 336. James Valle writing in 1980 also found it difficult to distinguish between the two ships when reporting on court-martials that had taken place on board each of them. *Rocks & Shoals* (Annapolis: U.S. Naval Institute Press, 1980), pp. 115, 131, 138-39, 258.

12. Record Group 45. National Archives, Navy and Old Army Branch, Washington, D.C. *General Letter Book*, enclosure no. 2, letter of Benjamin Stoddert to William Crafts, navy agent at Charleston, S.C., dated 23 August 1798.

13. Record Group 45. National Archives, Navy and Old Army Branch, Washington, D.C. *Entry 464 AC*, letter of J. Robertson, navy agent at Charleston, S.C., to Commodore John Rodgers, president of the Board of Navy Commissioners, dated 1 May 1820 and enclosing an undated letter from James Marsh, the *John Adams*'s master carpenter.

14. Ibid.

15. J. McNeil, *Charleston's Navy Yard* (Charleston, S.C.: Naval Civilian Administrators Association, 1985), p. 20.

16. *S.C. State Gazette & Timothy's Daily Advertiser*, 19 November 1798.

17. Record Group 45. National Archives, Navy and Old Army Branch, Washington, D.C. *Entry 464 AC*, letter of J. Robertson, navy agent at Charleston, S.C., to Commodore John Rodgers, president of the Board of Navy Commissioners, dated 1 May 1820 and enclosing an undated letter from James Marsh, the *John Adams*'s master carpenter.

18. P. A. Pinckney, *American Figureheads And Their Carvers* (New York: W. W. Norton & Company, 1940), p. 82.

which circumstance I am inclined to believe she will be considerably stiffer on the Starboard than the Larboard Tack.[19]

After launching, the task of fitting out was begun. First her three lower masts were stepped and then the miles of cordage used for the stays and shrouds that supported them were set up by the riggers, who also installed the network of running rigging necessary to control the sails. The ship's main deck guns were brought to Charleston on board the merchant ship *South Carolina* from the naval stores at Philadelphia.[20] She would mount twenty-six 12-pound cannons and six 24-pound carronades, making *John Adams* the most powerful warship ever built in Charleston and the first U.S. Navy vessel to be armed with carronades as part of her original battery.[21]

On 16 July Captain Cross brought *John Adams* down the Cooper River to the harbor to complete her for sea. The frigate was an impressive sight.

> It was a day of pride with [*sic*] Carolina when she saw her Oaks, her Pines, and her Cedars converted into a fine ship of war. *John Adams,* constructed by our young countryman, an artist of considerable merit; and commanded by a brave and skilful navigator, now rides on the bosom of our waters.[22]

All the vessels she passed coming downriver lowered their colors in the new ship's honor and, upon reaching the city, Cross dropped her anchors to a chorus of "federal huzzahs" from cheering townsmen along the shore, "federal huzzahs" that were echoed by seamen on board the nearby shipping in the harbor.[23] The frigate came to anchor off Prioleau's Wharf at the foot of Queen Street, where President Washington's boat had landed eight years earlier. *John Adams,* classed as a light frigate, measured 543 and 82/95ths tons by U.S. Carpenter's Rule,[24] and became an important addition to our navy, for there were only five ships in the fleet that carried more firepower than her 228-pound broadside.

The next day the difficult task of recruiting the 220 able seamen, ordinary seamen, and boys to fill out the ship's company was begun. A rendezvous was established at "the southeast corner of Governor's Bridge[25] on East Bay for enlisting a crew of brave tars."[26] Seamen, who were willing to work for the parsimonious naval pay, proved difficult to find at the bustling South Carolina port and several months later the secretary of the navy expressed concern as to whether Cross would be able to enlist an adequate crew. Despite the secretary's misgivings, however, Cross signed on enough local hands to man his proud South Carolina frigate and get her to sea before the year's end.

While riding at anchor off the wharf, *John Adams*'s outfitting and provisioning was continued. The topmasts and topgallant masts were sent aloft and her supplies were lightered out from the city's wharves. Barrels of brined beef and pork were loaded into the hold, the water casks were filled, and twenty thousand pounds of ship's bread were delivered from Norfolk in September.[27] Although Cross's original orders from the department were to depart for Cayenne, French Guiana, he received a new directive from Secretary Stoddert in October, making his first destination Puerto Rico.[28] The frigate was to cruise in that vicinity for a month and then join the Guadeloupe Station commanded by Commodore Thomas Truxton.

By 23 October the frigate's military stores had been taken on board, her manning was complete, and she was ready to weigh her anchors. A local newspaper reported,

> The United States frigate *John Adams,* George Cross, esq. commander, weighed her anchors yesterday with an intention of dropping down to the roads, but a strong easterly wind prevailing she came to anchor near James Island. On passing the town she fired a grand salute, which was returned by Fort Mechanic.[29]

19. Josiah Fox Papers. Peabody Museum of Salem, Salem, Mass. *Letter Book IV, pp. 432-435,* report of Master Carpenter Josiah Fox to Master Commandant Samuel Evans, commanding officer, U.S. Corvette John Adams, written at Washington Navy Yard on 17 May 1809.

20. J. McNeil, *Charleston's Navy Yard* (Charleston, S.C.: Naval Civilian Administrators Association, 1985), p. 21.

21. Record Group 45. National Archives, Navy and Old Army Branch, Washington, D.C. *General Letter Book,* letter of Benjamin Stoddert to William Crafts, navy agent at Charleston, S.C., dated 18 March 1799.

22. *S.C. Gazette & Timothy's Daily Advertiser,* 17 July 1799.

23. Ibid.

24. Record Group 45. National Archives, Navy and Old Army Branch, Washington, D.C. *Entry 170.*

25. J. McNeil, *Charleston's Navy Yard* (Charleston, S.C.: Naval Civilian Administrators Association, 1985), p. 21. This bridge, a wide brick arch, spanned the creek that was filled in to build the Charleston Market a few years later.

26. *S.C. State Gazette & Timothy's Daily Advertiser,* 17 July 1799.

27. Capt. D. W. Knox, U.S.N. (Ret.), ed., *Naval Documents Related to the Quasi-War Between the United States and France,* vol. 4 (Washington: Government Printing Office, 1936), 21.

28. Ibid., 243.

29. *S.C. State Gazette & Timothy's Daily Advertiser,* 24 October 1799.

The harbor was busy that day with a hundred-odd oceangoing vessels and an even greater number of coastal craft tied up at wharves on the Cooper River or anchored in the roadstead.[30] A week passed before *John Adams* was able to weigh anchor at James Island and drop down to Rebellion Roads on a fair wind. When she sailed past Fort Johnson her guns were fired for the first time, thundering out the traditional salute to the fort's colors, to which the fort replied gun-for-gun.[31]

The South Carolina frigate crossed the Charleston Bar into the Atlantic Ocean on 13 November and the same paper reported Captain Cross's impression of her sailing qualities on the following day:

> a letter from Capt. Cross to William Crafts, Esq. Naval Agent for the United States at this port, received yesterday by Mr. Delano, who piloted the frigate *John Adams*, mentioned that the ship may be ranked in the 1st Class of sailers, from the opportunity which he had of judging her. Mr. Delano confirms this pleasing intelligence and says she sails remarkably well.[32]

After a minor contretemps with the Spanish governor of Puerto Rico caused by the detention of a landing party,[33] *John Adams* joined the Leeward Squadron at St. Kitts in January 1800. By September, she had captured the French privateers *Le Jason* and *Le Decade* and recaptured eight merchant vessels from the French.[34] Additionally, she regularly convoyed American and allied shipping to and from West Indian ports-of-call and above the 26th parallel on their homeward journeys. The following winter a peace settlement with France was negotiated; and *John Adams* returned home to Charleston from her first cruise, which had lasted 397 days. During that time she had spent only thirty-five days in harbor, a unique statistic in our early navy.[35]

The scene of American naval action had shifted from the West Indies to the Mediterranean and the South Carolina frigate was ordered there for combat duty against the Barbary Powers. Her new commanding officer, Capt. John Rodgers of Maryland, who would lead the ship to additional battle honors, got her underway from Hampton Roads, Virginia, on 22 October 1802.[36] She arrived off Tripoli in May 1803 and went into action immediately, aiming her batteries at the massive Tripolitan forts and the gunboats lying under their protection.[37] On the 13th *John Adams* captured the Tripolitan cruiser *Meshouda*, mounting 18 nine-pounders and 10 six-pounders. *Meshouda* was the former American ship *Betsey* of Boston,[38] captured by the Tripolitans in 1796 and converted to a ship-of-war.[39] Under Rodgers's command *John Adams* proved to be the most aggressive warship in the Mediterranean Squadron which was then under the direction of lackadaisical Commodore Richard V. Morris. For example:

> At 5 P.M., May 28th. 1803 the *New York*, (Commodore M),[40] being 2 or 3 miles ahead of the Squadron, and a very light breeze, 9 Gun boats of the enemy and a large Zebec, were discovered, in shore of us. The Commodore made a signal for *John Adams*, to make sail—she had everything then set that could be of any advantage, but one lower steering sail, which was instantly set. The wind still decreasing and not comeing [*sic*] up with the *New York*, the Commodore, *hove to*, with *his Main Top sail aback*, & made the signal for the *John Adams* to lead the Van; she accordingly passed the *New York* & commenced the action on the Gun Boats, Zebec and Forts. The Commodore took a position, about 3 or 4 Cables length, on the weather bow of the *John Adams* and fired 2 or 3 broadsides, after which *no report* was heard from *his battery*. The *John Adams* continued firing untill darkness prevented objects from being distinguished. The Forts & Guns kept a constant fire. The *John Adams* remained, on the scene of action all night. In the morning the Commodore, with the remainder of his Squadron were about 11 or 12 miles distance to the Northward & Westward [41]

On 21 June *John Adams*, in company with the schoo-

30. J. McNeil, *Charleston's Navy Yard* (Charleston, S.C.: Naval Civilian Administrators Association, 1985), p. 21.

31. *S.C. State Gazette & Timothy's Daily Advertiser*, 1 November 1799.

32. Op. cit., 14 November 1799.

33. Capt. D. W. Knox, U.S.N. (Ret.), ed., *Naval Documents Related to the Quasi-War Between the United States and France*, vol. 4 (Washington: Government Printing Office, 1935), 565.

34. Op cit., vol. 7 (Washington: Government Printing Office, 1938), 372-73.

35. *S.C. State Gazette & Timothy's Daily Advertiser*, 17 December 1800.

36. G. W. Blunt-White Library, Mystic Seaport, Conn. *Log #227*, kept on board the U.S. Frigate *John Adams* under the command of Capt. John Rodgers by an unidentified person, 1802-1804.

37. Ibid.

38. Newburyport Customs House Records. Essex Institute, Salem, Mass. *Dimensions of the American merchant ship Betsey*, built on the Merrimack River in 1795.

39. Op. cit. and Capt. Dudley W. Knox, U.S.N. (Ret.), ed., *Naval Documents Relating to the Wars with the Barbary Powers*, vol. I (Washington: Government Printing Office, 1939), 175; vol. III (Washington: Government Printing Office, 1941), 41.

40. Refers to Commodore Richard Valentine Morris.

41. H. E. Huntington Library, San Marino, Calif. *ES 139*, excerpt from a letter of First Lieutenant T. W. Hooper, U.S.M.C. to William Eaton, describing events off Tripoli 28 June 1803. All italics contained in original document.

ner *Enterprize* commanded by Isaac Hull, destroyed a twenty-two-gun corvette that had been a tribute gift from the French Republic to the Bashaw of Tripoli.[42] Thus, in only six weeks, the South Carolina frigate had defeated the two largest ships in the Tripolitan Navy and attacked their fortresses and gunboats several times.

*John Adams* continued operations in the Mediterranean, commanded by Capt. Hugh G. Campbell of Charleston, after Rodgers assumed the squadron command on board *New York,* when President Jefferson recalled Morris. After a brief return to the United States in 1804, she made two more Mediterranean cruises during the Barbary Wars, travelling *en-flûte* as a storeship on both voyages,[43] first under the command of Isaac Chauncey and the second under John Shaw.[44] The frigate was then placed in ordinary at Washington Navy Yard late in 1805 and converted to a corvette during 1807-1808 by Josiah Fox, her original designer. She was recommissioned in May 1809 and cruised off the American coast, enforcing the Non-Intercourse Act from May 1809 to December 1811, under Samuel Evans and Joseph Tarbell.[45]

Pres. James Madison declared war against Great Britain on 18 June 1812 and *John Adams* was at Boston Navy Yard being altered, yet again, from a corvette to a jackass frigate,[46] mounting eighteen-pounder carronades on her newly built quarterdeck.[47] Charles Ludlow assumed command in July and took her to New York City where the ship remained until early 1814.[48] She then departed from that heavily blockaded port for Sweden under a flag-of-truce, carrying the peace commissioners Henry Clay and Jonathan Russell.[49] Two notable events occurred after *John Adams* reached Gothenburg; her captain, Master Commandant Samuel Angus, suffered a bout of temporary insanity,[50] and a third commissioner, John Quincy Adams, for whose father the South Carolina frigate had been named, joined the ship. From Sweden she conveyed the commissioners to Texel, Holland, and soon after began her voyage home.[51] While making her crossing Angus again suffered the temporary loss of his mental powers, for he wanted to attack two British ships even though still sailing under a flag-of-truce. The frigate returned to New York City on 5 September and a British intelligence agent there reported in late December,

> the *John Adams* Sloop paid off & laid up by the Navy Yard alongside the *Alert*.[52]

The autumn of 1815 found the veteran warship back in the Mediterranean where, unfortunately, she arrived too late to participate in Commodore Decatur's victory over the Algerian admiral, Raïs Hamidou.[53] The next year the ship returned home to do battle with the pirates who were preying on our West Indian merchant trade and was the flagship of the American squadron, commanded by Commodore John D. Henley, which captured Amelia Island in December 1817.[54]

*John Adams* then undertook her second diplomatic voyage, this time serving as the flagship of Commodore Oliver H. Perry, who was ordered to Venezuela, Buenos Aires, and Montevideo, to negotiate for the protection of American merchant ships from the letter-of-marque vessels commissioned by those newly independent South American nations. These quasilegal privateers, many of whom were little more than pirates, were plaguing the waters off the Spanish Main. Perry, the hero of the Battle of Lake Erie in the War of 1812, departed from Annapolis on 7 June 1819 for Angostura, Venezuela, located three hundred miles up the Orinoco

42. This ship was probably a corvette of the eighteen-gun class designed under the French Ordnance of 1786.

43. *En-flûte* refers to a warship that has been stripped of the majority of its armament and is acting in the capacity of an armed transport.

44. Capt. D. W. Knox, U.S.N. (Ret.), ed., *Naval Documents Relating to the Wars with the Barbary Powers,* vol. II (Washington: Government Printing Office, 1940).

45. Beinecke Library, Yale University, New Haven, Conn. *Private collection of John Rodgers papers owned by Reverend Peter Rodgers.*

46. A jackass frigate refers to a ship with a frigate configuration but without a forecastle.

47. Beinecke Library, Yale University, New Haven, Conn. *Private collection of John Rodgers papers owned by Reverend Peter Rodgers.*

48. Ibid. and the Mariner's Museum, Newport News, Va. *MSS#91,* journal of dimensions maintained by Capt. O. H. Perry. This journal gives the admeasured dimensions of *John Adams* as she existed in 1815 at New York Navy Yard.

49. H. D. Langley, "Respect For Civilian Authority," *American Neptune* XL (no. 1, 1980), 29-31.

50. Ibid.

51. Ibid.

52. Op. cit., and R. K. Murdoch, "Intelligence Reports of British Agents in the Long Island Sound Area 1814-1815," *American Neptune* XXIX (no. 3, 1969), 194-98.

53. Public Library, New York, N.Y. *Journal of Midshipman C. R. Caldwell,* kept on board the U.S. Ship-of-the-line *Independence.*

54. Beinecke Library, Yale University, New Haven, Conn. *Private collection of John Rodgers papers owned by Reverend Peter Rodgers.*

River. On arrival off the bar at the river's mouth, he shifted his broad pendant to the schooner *Nonsuch* for the journey upstream. Although his mission was successful, the young commodore succumbed to the ravages of yellow fever coming back downriver and died only an hour before *Nonsuch* rejoined *John Adams*.[55] The American vessels proceeded to Trinidad where Perry was buried with full military honors by the British garrison and civilian authorities.[56] The ship returned to the United States and joined the squadron of Commodore Charles Morris, who was ordered to complete Perry's mission and assigned the frigate *Constellation* as his flagship. Morris left Norfolk in *Constellation* with *John Adams* in September and joined his third vessel, *Nonsuch*, off Montevideo. Towards the end of the year *John Adams* departed from Montevideo for Buenos Aires with the commodore embarked. Fifty miles from Montevideo she suffered the first severe accident of her lifetime, when she ran hard aground in the Rio de la Plata, despite having a pilot from the local Portuguese squadron on board. Morris recorded in his autobiography,

> and it was not without great exertions for twenty-four hours, much danger, and considerable injury, that she was got afloat again.[57]

The squadron later returned to Hampton Roads via Rio de Janeiro, Martinique, and St. Thomas, arriving home on 24 April 1820.[58]

The heavily worked warship was rarely at rest during her long naval service and, typically, she was given almost immediate sailing orders for West Africa with supplies for the American Colonization Society settlement at Monrovia, Liberia. The ship's log records her departure on 19 July 1829 after a very brief refit at Norfolk Navy Yard:

> At 1 PM got underweigh and dropd. down to the Bite of Craney Island. . . . At 3.30 got underweigh and run down to Hampton Roads.[59]

After speaking *Constellation* southwest of the Azores and the sloop-of-war *Hornet* at Porto Praya in the Cape Verde Islands, the ship arrived off Monrovia on 14 October 1820:

> Sent all the things that were sent out by the Colonization Society in the Ship on board the Schooner & at 10 AM she saild for Sherbro with Mr Croker.[60]

Her cargo of supplies discharged, she joined the West Africa Squadron and took part in the capture of four slave ships.[61] One of the captures was effected in a joint boat operation with H.B.M. Brig *Snapper* on 22 October,

> at 4 (AM) hoisted out the barge first and second Cutters Lieut Ramsay, Paige and Mids. Jones, Weaver, Gordon, Little Doct Balfaure left the Ship in Company Capt Nash of HBM Brig *Snapper* in the boat for the Rio Purrgo.[62]

The log laconically logged the success of this expedition on the following day:

> At 3 PM the American Schooner *Exchange* anchord nere [*sic*] us. A prize to the Boats taken off the Rio Pungo. She is a Slave trader from Baltimore via Havannah.[63]

Back in the United States during 1821 *John Adams* and *Cyane* escorted the new ship-of-the-line *North Carolina* on its maiden voyage from the Delaware River to Norfolk. After completing that mission *John Adams* was ordered to the West India Squadron in 1822 and became the flagship of Commodore David Porter the following year in time to participate in the notorious Foxardo Affair.[64]

The South Carolina vessel narrowly averted her second near-disaster at Pensacola in November 1825, while carrying three members of the naval hierarchy: Commodores William Bainbridge, James Biddle, and Lewis Warrington. The senior officers were conducting a survey of the local harbor to evaluate its possible use as a home port for the West Indies Squadron. *Hornet* and *John Adams* were making their final departure when the wind direction shifted and simultaneously be-

55. A. S. MacKenzie, *Commodore Oliver Hazard Perry* (1910 Centennial edition, Akron: J. K. Richardson & Sons), pp. 388-436; Charles J. Dutton, *Oliver Hazard Perry* (New York: Longmans, Green and Co., 1935), pp. 272-87, and Gardner W. Allen, *Our Navy and the West Indian Pirates* (Salem: Essex Institute, 1929), pp. 18-19.

56. Op. cit.

57. C. Morris, "The Autobiography of Commodore Charles Morris, U.S.N.," *Proceedings of the U.S. Naval Institute* VI (no. 12, 1880), 193.

58. Lt. G. F. Emmons, U.S.N., *Statistical History of the Navy of the United States* (Washington: Gideon & Co., 1853), p. 95.

59. G. W. Blunt-White Library, Mystic Seaport, Conn. *Log #10*, journal kept on board the U.S. Ship *John Adams* by J. L. Cummings, A. S. Wadsworth, Commanding.

60. Ibid. Croker was the agent at Monrovia for the A.C.S.

61. Ibid.

62. Ibid.

63. Ibid.

64. G. W. Allen, *Our Navy and the West Indian Pirates* (Salem: Essex Institute, 1929), pp. 65-82.

came light and variable. The shallower draft sloop-of-war successfully crossed the bar at the harbor mouth but the frigate, after twice missing stays, failed to respond to her helm. With their vessel out of control and surrounded by shoals, the frigate's officers intentionally drove her across the bar, west of the regular channel, as a last resort. She grounded heavily three times, knocking off her rudder, breaking her false keel, and damaging her stern.[65] In Biddle's own words, "never before was a ship that escaped so near to going to Davy Jones."[66]

After further Caribbean duty, *John Adams* was ordered to Norfolk Navy Yard in 1829 for a two-year conversion to a 2nd Class sloop-of-war.[67] Retaining only her original main timbers, the new flush-decked ship bore little resemblance, from the waterline up, to the proud frigate that had departed from South Carolina waters thirty-two years earlier, although below the waterline her underbody remained unchanged.[68] Characteristically, as soon as she was recommissioned, she set sail for the Mediterranean and from there carried her former commodore, David Porter, out to his post as U.S. minister to the Ottoman Empire.[69] On 4 August, while the ship lay in the Dardanelles, Porter wrote to his wife, Evalina, whom he was destined never to see again, about another American, who would also pass away at Constantinople,

> My Dear . . . I yesterday had the very great pleasure of receiving your letter of the 4th of June by the hands of Mr. Henry Eckford whose beautiful ship[70] now lies about one-hundred yards astern of us, where she anchored last evening.[71]

65. G. F. Pearce, "William Bainbridge, A Journal from City of Washington to Pensacola on USS *Hornet;* Return on USS *John Adams* and by Stagecoach from Savannah, Georgia, to Petersburg, Virginia, October-December 1825," *American Neptune* XLIV (no. 4, 1984), 245.

66. D. F. Long, *Sailor-Diplomat, a Biography of Commodore James Biddle 1783-1848* (Boston: Northeastern University Press, 1983), p. 131.

67. W. Lowrie and W. S. Franklin, eds., *American State Papers, Class VI, Volume III, Naval Affairs, Documents, Legislative and Executive, of the Congress of the United States* (Washington: Gales and Seaton, 1834), pp. 348-402 and pp. 753-87, Annual Report of the Secretary of the Navy, 8 December 1829 and 7 December 1830.

68. Record Group 45. National Archives, Navy and Old Army Branch, Washington, D.C., *Bureau of Construction & Repair drawing C&R#85740.*

69. D. F. Long, *Nothing Too Daring* (Annapolis: Naval Institute Press, 1970), p. 161, and P. D. Wheelock, "Henry Eckford (1775-1832), An American Shipbuilder," *American Neptune* VII (no. 3, 1947), 189.

70. Refers to the *United States*, a twenty-six-gun, thousand-ton corvette Eckford built for the Ottoman Empire.

71. P. D. Wheelock, "Henry Eckford (1775-1832), An American Shipbuilder," *American Neptune* VII (no. 3, 1947), 189.

Subsequently, *John Adams* rejoined the Mediterranean Squadron and was part of the American fleet that participated in the operation against King Bomba of the Two Sicilies in 1832 to obtain redress for wartime American spoliation claims.[72] Eighteen thirty-three found her back in Asia Minor, convoying allied merchantmen off the Greek and Turkish coasts during the civil war there, before returning to the U.S.A. via Morocco, Liberia, and the West Indies.[73] From 1834 through 1837 she was again in the Mediterranean, departing from the U.S.A. under Master Commandant David Conner and returning to New York City on 5 May 1837, commanded by Commander Silas K. Stringham.[74] Stringham's wardroom included two officers who would subsequently gain considerable fame as explorers, Cadwalader Ringgold and William F. Lynch.

*John Adams* was given a five-month refurbishment at New York Navy Yard and placed in commission once more by Commander Thomas W. Wyman on 5 December 1837. In company with the new frigate *Columbia*, flagship of Commodore George C. Read, she was ordered on an around-the-world cruise to the eastwards.[75] After clearing the Cape of Good Hope and calling at Muscat and Bombay, the squadron arrived at Colombo, Ceylon, where they first learned of the heinous *Eclipse* disaster. The commodore weighed anchor immediately for Sumatra, westernmost of the Sunda Islands, where the atrocity had taken place. The American warships arrived off Quallah Battoo on 20 December 1838, where Read issued the following orders to Wyman in the hope of obtaining a peaceful resolution to the local situation before attempting punitive action against the well-fortified town:

> You will call upon the Rajah of Kwala Batu, and inform him what we have learned at Ceylon and other places re-

72. F. Pratt, *The Navy, a History* (Garden City: Doubleday, Doran and Company, 1938), p. 227.

73. New-York Historical Society, New York, N.Y. *Journal of William L. Herndon*, kept on board the U.S. Frigate *Guerriere* and the U.S. Sloop-of-war *John Adams* and G. W. Blunt-White Library, Mystic Seaport, Conn. *VFM 47*, Monthly Return of Officers & Crew on board the U.S. Ship *John Adams*, 1832 and 1833.

74. Lt. G. F. Emmons, *The United States Navy, 1775-1853* (Washington: Gideon & Co., 1853), p. 109. In 1836 the rank of master commandant was replaced by the modern rank of commander.

75. Nimitz Library, U.S. Naval Academy, Annapolis, Md. *Special MSS #33*, journal of Commander Thomas W. Wyman kept on board the U.S. Ship *John Adams*.

specting the attack and plunder of the ship *Eclipse*, and the murder of Captain Wilkins and one of his crew.

You will make known to him that it is the desire of the Government of the United States to remain at peace and on terms of friendship with the chiefs and people of Sumatra; that we have come to the island as friends, and hope that we shall be enabled to leave Kwala Batu in the continuance of the same sentiments. But this must depend upon the readiness which shall be evinced by the Rajah to give up one the murderers of Captain Wilkins, who, having taken refuge in Kwala Batu, has been protected by the Rajah.

You are also instructed to demand all the money and any other property which the murderer brought with him to this place, and is known to be part of the plunder of the ship *Eclipse*.

You will endeavor to make the Rajah explicit, by inquiring of him what course he means to take; whether that of a friend or an enemy. If a friend, he will at once give up this murderer; and cause the money and other property taken from the ship *Eclipse* and may now be found at Kwala Batu, immediately to be returned, through me, to the proper owners.[76]

Wyman was to bring the local rajahs on board *Columbia* but the American's success ended there. After several meetings the rajahs would neither give up the murderers of Captain Wilkins and his crewman, nor restore the property stolen from *Eclipse*. Reluctantly, Read gave the necessary orders and the ships moved in and bombarded the town and five forts of Quallah Battoo. The squadron then continued to Mukkee, where Wilkins's murderer was said to be harbored, and bombarded that place on New Year's Day 1839. After the bombardment, Wyman led a landing force and burned the town, which had previously been abandoned. Afterwards, *Columbia* and *John Adams* carried on to SooSoo, where the native rajahs willingly signed treaties disavowing piracy against American merchantmen in the future. The rest of the guilty rulers also signed the treaties and the ships sailed for the west coast of South America where they called at Callao and Valparaiso. When the squadron returned to Boston via Cape Horn and Rio de Janeiro on 15 June 1840, *John Adams* completed her first circumnavigation of the globe, accomplishing this then-remarkable feat in her forty-first year of service. After a lengthy refit at Boston Navy Yard she was recommissioned in March 1842 under Commander Thomas A. Conover and sent out to join Commodore Charles Morris's Brazil Squadron for a three-year stint south of the equator. When she first arrived at Rio de Janeiro, Acting Midshipman Philip Spencer, who was later hung as a mutineer in the famous *Somers* affair, was assigned to the ship. Spencer was ordered home by Commodore Morris in consequence of a drunken incident in the town during May 1842. After the tour of duty on the Brazil Station the sloop-of-war returned to New York City on 27 May 1844.[77]

Commander William J. McCluney assumed command on 3 July 1845 and was ordered to join the Home Squadron in the Gulf of Mexico then operating under the overall command of Commodore David Conner, who was later relieved by Commodore Matthew Calbraith Perry. *John Adams* played an active role during the Mexican War from 1845 through 1848 and at one point became part of the largest American naval squadron in history. This fleet was assembled off Vera Cruz in March 1847, under Perry's command, to attack the city and its heavily armed Castle of San Juan d'Ulloa.[78]

Over the five years following her Mexican War service, the ship took part in joint operations with the Royal Navy against slavers off the equatorial coast of Africa,[79] then carried the survivors of the *Yorktown* tragedy home and finally, conducted a hydrographic survey of the West African coast.[80] Switching oceans in 1855, *John Adams* returned to the Pacific area again, where she bombarded five Fijian towns in retaliation for native cannibals eating American merchant seamen. Her actions were related in the 21 February edition of the Boston *Daily Evening Traveller*:[81]

The United States sloop-of-war, *John Adams* arrived at Panama on the 3d inst. from a visit to the Fejee Islands. The Panama Star & Herald contains the following intelligence respecting her cruise. The U.S. Ship *John Adams*, left their port in July last, bound to the Fejee Islands, to inquire into, and seek reparation for many cruelties committed by the natives inhabiting those Islands, and to demand indemnity for the plunder of several American ships trading and fishing in the Fejeean Archipelago. The obstinate and refractory nature of

76. Capt. J. F. Campbell, "Pepper Pirates and Grapeshot," *American Neptune* XXI (no. 4, 1961), 299-300.

77. Nimitz Library, U.S. Naval Academy, Annapolis, Md. *Special MSS #90*, journal kept on board the U.S. Ship *John Adams* by an unidentified officer.

78. K. J. Bauer, *Surfboats and Horse Marines, U.S. Naval Operations in the Mexican War, 1846-48* (Annapolis: U.S. Naval Institute Press, 1969).

79. J. McNeil, *Charleston's Navy Yard* (Charleston, S.C.: Naval Civilian Administrators Association, 1985), p. 23.

80. Capt. D. W. Knox, U.S.N. (Ret.), *A History of the United States Navy* (New York: G. P. Putnam's Sons, 1936), p. 182.

81. *Daily Evening Traveller*, Boston, Mass., 21 February 1856.

these savages demanding the exercise of vigorous and harsh measures, the Commander of the *John Adams* deemed it expedient to teach them their obligations to the human race, and did so in a manner that made some impression upon them, and which, it is to be hoped, they will long remember.

During the cruising's of the *John Adams* in the Fejee group of Islands five sharp engagements took place between her crew and the cannibals of Polynesia, in which American valor was always victorious. Five of their largest towns were burnt, and all the houses therein reduced to ashes. We learn that an important treaty has been ratified between Commander Boutwell and Tui Vite, or Thokambau, the King of Fejee, on behalf of the American Government, the particulars of which have not transpired.

The visit of this ship to the Fejee Islands, has resulted in reestablishing order, and restoring the confidence of American residents there.[82]

The opening of the year 1856 found her anchored off San Francisco to help put down the vigilante insurrection there,[83] after which the much-travelled South Carolina warship, now completing a half-century of active service, was assigned to the Pacific Squadron. Later transferred from that command to the China Station, she helped defend Canton during the Taiping Rebellion of 1860.[84]

When she came home from the Far East in 1862 the ship was assigned, with the sloops-of-war *Macedonian* and *Marion*, to the Naval Academy's Civil War location at Newport, Rhode Island, as a sail-training ship.[85] Then, at the ripe old age of sixty-four, *John Adams* was ordered to war duty for the last time in her career, arriving at Port Royal, South Carolina, on 21 August 1863 to join the South Atlantic Blockading Squadron.[86] After remaining on that station for several months as a storeship, she joined the blockading fleet at Charleston. By the time the old ship arrived there in late December, Fort Sumter had been reduced to a pile of rubble and the federal guns on Morris Island were relentlessly pounding the beleaguered city.

82. G. R. Ward, editor, *American Activities in the Central Pacific 1790-1870* (Ridgewood, N.J.: The Gregg Press, 1967), Baker p. 9 and Fiji pp. 64-66.

83. R. E. Johnson, *Thence Around Cape Horn* (Annapolis: U.S. Naval Institute Press, 1963), p. 108.

84. C. T. Henson, Jr., "The U.S. Navy in the Taiping Rebellion," *American Neptune* XXXVIII (no. 1, 1978), 39; and R. E. Johnson, *Far China Station, The U.S. Navy in Asian Waters 1800-1898* (Annapolis: The Naval Institute Press, 1979), p. 107.

85. T. G. Martin, *A Most Fortunate Ship, A Narrative History of "Old Ironsides"* (Chester, Conn.: The Globe Pequot Press, 1980), p. 272.

86. E. K. Rawson and R. H. Woods, eds., *Official Records of the Union and Confederate Navies in the War of the Rebellion*, ser. I, vol. 16 (Washington: Government Printing Office, 1903), 496.

The blockade of Charleston had gradually tightened until the city was effectively cut off from the sea. The ships of the Union squadron were now divided between the inside of the bar and on patrol offshore. When she took up station off Morris Island there were sixteen other Union vessels inside, including the ironclad *New Ironsides*, which, although armed with an eighteen-gun battery including two huge 200-pound rifles, had proven almost impossible to navigate. Nine more warships patrolled outside the bar and several of them were ironclad steamers or steam-powered sloops-of-war.[87] On 22 February 1864, *John Adams* took on board forty survivors from the steam-sloop *Housatonic*, which had been sunk by the Confederate Navy's submarine *H. L. Hunley*.[88] The Union vessel thereby gained the dubious distinction of being the first warship in the world sunk by a submarine in naval warfare.

Rebel blockade runners in their speedy, low-silhouetted steamers now attempted their daring runs only on moonless nights, and even then with little chance of success. During the first week of July 1864, *John Adams* captured the blockade runner *Pocahontas*.[89] The veteran South Carolina warship next hoisted the broad pendant of Capt. J. F. Green, senior officer in charge of the inner fleet, on 24 July 1864.[90] Now armed with heavy Dahlgren guns and Parrott rifles, the ex-frigate's commodious hold allowed her to act as a munitions storeship in addition to flying Green's broad pendant. To solve the manning problems of blockade duty, the Union Navy was not adverse to enlisting ex-slaves as the following report from Commodore S. C. Rowan, commander of the South Atlantic Blockading Squadron, to Secretary of the Navy Gideon Welles describes:

> abstract of information received from a contraband refugee (Tony Bryan) who, in company with two other contrabands was taken on board of the U.S.S. *Sonoma*, in the Stono, on the night of the 11th instant, having been picked up by one of the guard boats of that vessel. Two of these men (Tony Bryan and Moses Bryan) are house carpenters by trade, and all of them have been shipped as first-class boys on the U.S. sloop *John Adams* for subsequent detail.[91]

*John Adams* remained on duty inside the bar until

87. E. K. Rawson and R. H. Woods, eds., *Official Records of the Union and Confederate Navies in the War of the Rebellion*, ser. I, vol. 16 (Washington: Government Printing Office, 1903), 217.

88. Ibid., 332.

89. Ibid., 563.

90. Ibid., 578.

91. Ibid., 397.

February of 1865 when the Confederates evacuated Charleston in the face of General Sherman's oncoming army. The former South Carolina frigate then sailed into her native harbor and proceeded up the Cooper River, where she had been built by the citizens of Charleston sixty-six years before, but this time there were no "federal huzzahs" from those citizens on the shore.[92]

The ancient warship was ordered to Boston Navy Yard in the late summer of 1865 and decommissioned there in September.[93] In October 1867 *John Adams* suffered the inglorious fate of so many glorious wooden warships when she was sold out of the U.S. Navy and sent to the breaker's yard.[94]

92. J. McNeil, *Charleston's Navy Yard* (Charleston, S.C.: Naval Civilian Administrators Association, 1985), p. 24.

93. *Dictionary of American Naval Fighting Ships*, vol. III (Washington: U.S. Government Printing Office, 1968), 523.

94. Ibid.

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# Steamers to Savannah:

## The Origins and Establishment of the New-York and Savannah Steam Navigation Company

JAMES P. DELGADO*

THE Savannah River sweeps across the breadth of Georgia, cutting a swath through the coastal plain before emptying its muddy waters into the Atlantic. Born in the mountains of North and South Carolina, the Savannah is fed by springs, streams, and rainfall as it cuts through the red clay foothills of Georgia. On its way to the sea the Savannah passes through marl-strewn hillsides, sandy pine barrens, and stagnant swamps. On 12 February 1733, forty English settlers and their families sailed ten miles up the river to establish the first city in the new English colony of Georgia. The new city was named Savannah for the surrounding countryside, a semitropical grassy plain with scattered trees.

The city of Savannah's prosperity was linked to both the soil and the river on whose banks it had been built. Along the Savannah rice, corn, peas, a variety of other fruits and vegetables, and cotton were planted.[1] Cotton became the premier crop with the late eighteenth-century invention of the cotton engine (or "gin") by Eli Whitney, a Yankee schoolteacher residing on the banks of the Savannah. The cotton "gin" removed the seeds from three hundred pounds of cotton in the time it had previously taken one person to clean a pound by hand. Large plantations with large numbers of slaves to tend the hundreds of acres planted with cotton were established on the banks of the Savannah. The city of Savannah "drew upon the prosperity of the plantations" to expand other commercial interests.[2] Banking, local industry and commerce, and shipping marked Savannah's prosperous growth in the first two decades of the nineteenth century. Savannah, situated near the mouth of a great river which pierced into the cotton-growing interior of Georgia, became an important port city, exporting cotton and importing New England and European-manufactured goods.

Initiative marked Savannah's prosperity and growth. Realizing the significance of the maritime trade, Savannah merchants subscribed to efforts to establish steam navigation on the river and into the Atlantic. In May of 1818 the "Savannah Steam Ship Company" announced the sale of shares. Monies raised would be used to "purchase a suitable ship of the first class, completely fitted . . . on board of which shall be placed a steam engine . . ." which was to be sent on a speculative voyage across the Atlantic.[3] The necessary capital was obtained and the new steamship, SS *Savannah*, arrived from New York on 5 April 1819. SS *Savannah* sailed and steamed across the Atlantic in 1819 with best wishes and ardent desires for success from Savannah's mercantile community. The voyage, the first made by a steamship across the Atlantic, was heralded as an engineering triumph. It was also a financial failure. Savannah's declining exports, high protective tariffs, and

* The staffs of the following institutions were extremely helpful: the Bancroft Library, University of California, Berkeley; the Georgia Historical Society, Savannah; the Webb Institute of Naval Architecture, Glen Cove, N.Y.; New-York Historical Society, New York, N.Y.; J. Y. Joyner Library, East Carolina University, Greenville, N.C.; and the Judicial, Fiscal, and Social Branch, National Archives, Washington, D.C. I particularly wish to thank Dr. William N. Still, Dr. Donald Parkerson, and Gordon P. Watts, Jr., for reading and commenting on the manuscript.

1. George White, *Statistics of the State of Georgia: Including an Account of Its Natural, Civil, and Ecclesiastical History; Together With a Particular Description of Each County* . . . (Savannah: W. Thorne Williams, 1849), p. 155.

2. Thomas L. Stokes, *The Savannah*. (Athens: University of Georgia Press, 1951), p. 193.

3. *Savannah Gazette*, 7 May 1818 as quoted in Frank O. Braynard, *S.S. Savannah: The Elegant Steam Ship* (Athens: University of Georgia Press, 1963), p. 28.

a nationwide economic depression doomed SS *Savannah*'s abortive attempt to develop a transatlantic trade as the city slipped in the backwaters of a stagnating coastal trade.

A commercial revival in the 1830s once again sparked the rise of "King Cotton" and the port of Savannah. Cotton exports soared from 49,570,200 pounds of cotton in 1825 to 102,329,640 pounds in 1840. Rice exports soared as well, with 24,392 tierces (over one ton each) of rice shipped in 1840.[4] Savannah also capitalized on Georgia's rich timber resources and lumber industry. Sawmills and lumber exports to foreign and New England ports made Savannah the "lumber center of the South Atlantic" by the mid-1840s.[5] Savannah's waterfront was busy with the frequent arrivals of coastwise schooners, steamboats towing "towboats" laden with cotton from the interior, and sailing packets from New York. Packet service irregularly linked New York, the principal American port on the Atlantic, with the various southern cotton ports.[6] Savannah was visited by four packet lines by 1848, three of which connected the city with New York, and one which connected Savannah with Philadelphia.[7]

Steam-powered machinery boosted Savannah's economic growth and maritime trade. Steamboats, trains, oceangoing steamships, and steam-powered cotton presses and gins developed in the boom times of the 1830s and 1840s marked the ascendancy of Savannah. Steamboats, at first built abroad and later locally, plied the river towing barges laden with cotton. By 1847, the Hamburg (South Carolina) *Republican*'s editors noted:

> . . . we believe that there has been no time when boating business on the Savannah River was more prosperous. The Iron Steamboat Company has the Lamar, John Randolph, Amory Sibley . . . and 16 towboats. The Steam Boat Company of Georgia has the Chatham, Cherokee and the Thos. A. Metcalf . . . 16 towboats, and several lighters. There is also a number of private boats, such as the Steamer Ivanhoe and the H. L. Cook. These boats appear to be all kept very busy, and it should seem from the additions recently made that they are doing well. We learn that their up freights have been larger this fall than they had been before many years.[8]

The predominance of the Savannah River as a link to the interior regions of Georgia and South Carolina was threatened in 1830 when the newly constructed South Carolina Railroad linked Savannah's rival port, Charleston, South Carolina, with Augusta, Georgia. The railroad began to divert trade and export traffic from Savannah to Charleston.

In response to the threat of the South Carolina Railroad, enterprising citizens of Savannah began to formulate plans for a railroad of their own. First chartered in December of 1833 as the Central Rail Road and Canal Company, the railroad would connect Savannah with Macon, Georgia, in the interior. Construction began in 1835, the same year the company's name was changed to the Central Rail Road and Banking Company of Georgia.[9] The line to Macon was completed in October of 1843. Other railroads would ultimately link with the Central Rail Road, tying Savannah by rail to the cotton-producing interior of the state. The eastern cotton belt, formerly only peripherally touched by waterborne transportation, was now linked by rail to the coast.[10] Cotton exports boomed and "a kind of cotton insanity" gripped Savannah. "Nothing is heard but conversations about the article of cotton: bales are piled up high in every store and at every corner. Whoever visits a merchant's office will find it filled with samples: if the clerks are not occupied with correspondence, rest assured the subject is cotton."[11]

One merchant actively involved in the cotton trade was Edward Padelford. Born in Bristol, Massachusetts, in 1802, Padelford migrated to the city at a young age, arriving in Savannah by 1818.[12] By 1848 Padelford was an active member of Savannah's business community. A cotton factor (commission merchant), Edward Padel-

4. White, *Statistics of the State of Georgia . . .*, p. 159.

5. John A. Eisterhold, "Savannah: Lumber Center of the South Atlantic," *Georgia Historical Quarterly* LVII (Winter 1974), 526-43.

6. Robert Greenhalgh Albion, *Square-Riggers on Schedule: The New York Sailing Packets to England, France, and the Cotton Ports* Princeton, N.J.: Princeton University Press, 1938).

7. Joseph Bancroft, *Census of the City of Savannah, Together With Statistics, Relating to the Trade, Commerce, Mechanical Arts and Health of the Same; To Which is Added Historical Notes, and a List of the Incorporated Companies . . .* (Savannah: Edward C. Councell, 1848), pp. 31-32. Hereafter cited as Bancroft, *Census. . . .*

8. Hamburg, South Carolina *Republican*, 6 November 1847.

9. Richard E. Prince, *Central of Georgia Railway and Connecting Lines* (Millard, Neb.: R. E. Prince, 1976), pp. 5-6.

10. Ulrich Bonnell Phillips, *A History of Transportation in the Eastern Cotton Belt, to 1860* (New York: The Columbia University Press, 1908), pp. 2, 18.

11. Quoted in *Savannah Revisited: A Pictorial History* (Savannah: The Beehive Press, 1973), p. 50.

12. Padelford is mentioned in the *Columbian Museum and Savannah Gazette* of 14 November 1818 as a member of the local militia. The manuscript 8th United States Census (1850) for Chatham County, Georgia, lists his age as forty-eight; the 9th Census (1860) lists his place of birth.

ford was in business with Joseph S. Fay of Savannah. Their firm, Padelford, Fay & Company, Shippers and Commission Merchants, was located on the riverfront at 104 Bay Street.[13] Padelford was also president of Savannah's Marine and Fire Insurance Bank and was a principal stockholder in the Central Rail Road and Banking Company. Padelford's railroad stock was not his only involvement with steam-power. In 1847 he had erected on his wharf two "Tyler" cotton presses, "each press capable of depressing 400 bales per day."[14] The same year Padelford, in conjunction with a group of fellow businessmen, embarked on a major new enterprise, a steamship line to link Savannah with New York.

The port of New York had risen to prominence after the War of 1812 and a subsequent influx of British goods. New York gradually asserted a prominent role in the southern cotton trade. British demand for southern cotton and shrewd maneuvers of New York merchants contributed to a shift in the patterns of coastal trade. New York owned and operated coastal packets carried cotton from the southern ports to New York, where the cotton was shipped by transatlantic packets to Liverpool. Similarly, British trade goods arriving in New York were carried south in the coastal packets.[15] While Yankee merchants and entrepreneurs became wealthy in the southern cotton trade, some southern merchants also prospered, investing in the coastal packet lines and serving as commission merchants and agents. Padelford, Fay & Company was one of several Savannah firms that had served as agent to coastal packet lines.[16]

No doubt the profits of the coastal packet trade and the possibilities of steam-powered vessels inspired Edward Padelford and several compatriots to establish a steam line to New York. An additional incentive, similar to that which had spurred the development of the Central Rail Road, was the successful inauguration of a steamship line connecting New York with Savannah's rival port, Charleston. The steamer *Southerner* of Spofford, Tileston, and Company commenced operation in September 1846 and was followed by a second steamer, *Northerner*, in October 1847. Savannah's proposed line was not that city's only coastal steamship company. By 1848 two firms, the Daily United States Mail Steam Packet Line and the Semi-Weekly United States Mail Steam-Packet Line, linked Savannah with Charleston and Palatka, Florida.[17] Savannah's citizens had always shown marked initiative with steam navigation, as evidenced by the pioneer effort of SS *Savannah*, two coastal steam packet lines, three separate steamboat lines linking Savannah with Augusta, Georgia, and five steamers employed in the port not belonging to any regular line.[18]

The steamship line's incorporation was approved by the Georgia legislature on 22 December 1847. The newly incorporated body, the New-York and Savannah Steam Navigation Company, was chartered

> for the purposes and business of building, equipping and furnishing, fitting and owning, vessels to be propelled solely or partially by steam, and to be run and employed in navigation to and from the port of Savannah to any ports of the United States or the West Indies, but more particularly from Savannah to the port of New-York. . . .[19]

The capital stock of the new company was $300,000, divided into shares of $100 each. When $150,000 in shares had been subscribed the company was authorized to commence operations. Five directors oversaw the company; they were George Hall, John W. Anderson, Edward Mills, Edward Padelford, and possibly Robert Haversham. All were Savannah merchants; Anderson, like Padelford, was a cotton factor and had been one of the original directors of the Central Rail Road as well as a state representative and an alderman of Savannah. Robert Haversham, a member of an old Savannah family, had been one of the original incorporators of the Savannah Steam Ship Company, backers of the failed SS *Savannah*.[20]

13. The first directory for the city of Savannah lists the firm and its partners. See David H. Galloway, comp., *Directory of the City of Savannah, For the Year 1858* (Savannah: George N. Nichols, 1858), pp. 28, 63.

14. The Savannah *Daily Georgian* of 3 January 1839 records Padelford's election to the presidency of the Marine and Fire Insurance Bank. He served until June of 1853. Padelford's will, dated 5 May 1870, lists 525 shares in the Central Rail Road. Miscellaneous Manuscripts, Georgia Historical Society, Savannah. The steam press particulars are from Bancroft, *Census* . . . , p. 23.

15. Robert Greenhalgh Albion, *The Rise of New York Port, 1815-1860* (New York: Charles Scribner's Sons, 1939), p. 14.

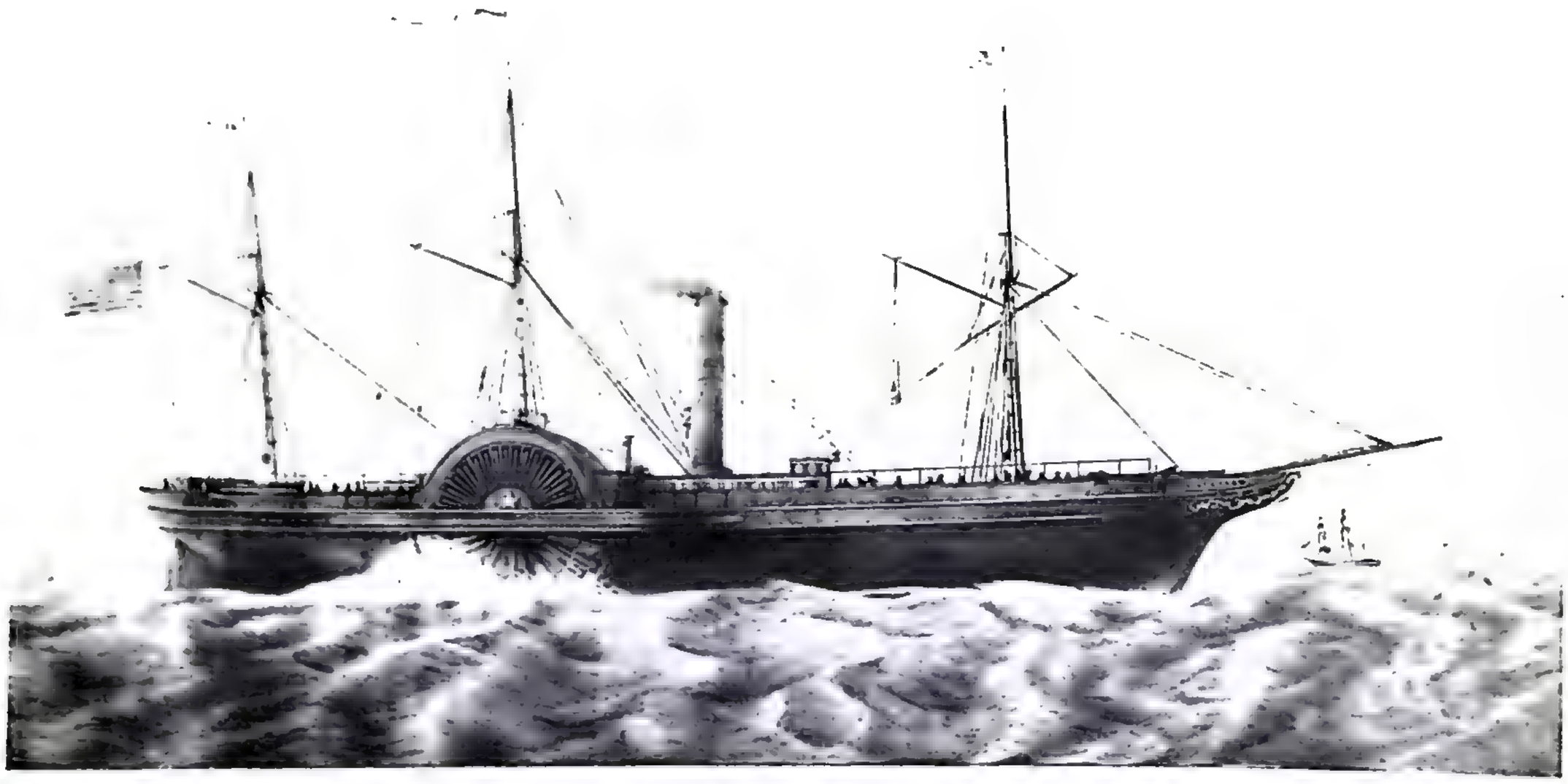
16. Carl C. Cutler, *Queens of the Western Ocean* (Annapolis, Md.: United States Naval Institute, 1961), p. 434.

17. Bancroft, *Census* . . . , p. 32.

18. Albion, *Rise of New York Port*, p. 103, and Bancroft, *Census* . . . , pp. 32-33.

19. *Acts of the State of Georgia, 1847* (Milledgeville: Miller Grieve, 1848), pp. 131-33.

20. *Acts of the State of Georgia*, p. 131, and Cutler, *Queens of the*



CHEROKEE.

New York & Savannah Line of Ocean Steam Ships.

(Courtesy of the Mariners Museum, Newport News, Virginia.)

Padelford, Fay & Company were the Savannah agents of the New-York and Savannah Steam Navigation Company. The New York agent and president of the company was Samuel L. Mitchill, a commission merchant who "had been running small sailing craft between New York and Savannah for several years. . . ."[21] Under Mitchill's leadership the line came to life. Two steamships were needed to accommodate the initial demands of the company. An order for the vessels was placed with one of New York's leading shipbuilders, William H. Webb. Both vessels specified to be of twelve hundred or more tons. The names chosen for the ships were *Cherokee* and *Muscogee*, for two of Georgia's Indian tribes. *Cherokee* was the first to be built. Her keel was laid on 14 February 1848.[22]

The choice of William H. Webb to build the two steamers was a wise decision. Webb was born in New York to an established shipbuilding family; his father, Isaac Webb, was a shipbuilder. William Webb left school at age fifteen, against his parents' wishes, to apprentice in his father's shipyard. Following his father's death Webb entered into business with his father's partner in 1840. In 1843 the business reverted to Webb. Webb's yard turned out 133 sail and steam vessels between 1840 and 1865, "the greatest tonnage to come from a single yard in the period."[23] William Webb made

*Western Ocean*, p. 279. A summary of John W. Anderson's career will be found in Robert Manson Myers, ed., *The Children of Pride: A True Story of Georgia and the Civil War* (New Haven and London: Yale University Press, 1972), p. 1453. Haversham's *Savannah* involvement is discussed in Braynard, *S.S. Savannah*, pp. 30-31.

21. Cutler, *Queens of the Western Ocean*, p. 279. Mitchill is listed at 194 Front Street, with a home at 25 Union Place, in John Doggett, Jr., comp., *Doggett's New-York City Directory, For 1847 and 1848* (New York: John Doggett, Jr., 1847), p. 289. He remained in business until the end of the American Civil War in 1865.

22. William H. Webb, "Certificate Book," S.S. *Cherokee*. Bound manuscript, Webb Institute of Naval Architecture, Glen Cove, New York.

23. Fred Erving Dayton, *Steamboat Days* (New York: Tudor, 1925), p. 389.

a substantial contribution to naval architecture; he built renowned clippers, steamers, and warships during his long career. In his later years William H. Webb established the Webb Institute of Naval Architecture, which continues to train naval architects.

*Cherokee* was launched from Webb's yard on 12 June 1848. The steamer was 210 feet, 8 inches long, with a 35-foot, 4-inch beam and a 22-foot, 3-inch depth of hold, measuring 1,244 tons (old measurement). When launched the hull did not house much; until September workers labored to fit *Cherokee* with her engines, boilers, and other machinery, and build her cabins. In Savannah the completion of the ship was eagerly awaited. An 1848 advertisement noted that

> Of this projected line, one ship is already launched and in process of completion, and will be on the route between this port and New York in September; and a second one is contracted for, to follow her, and will be ready in March next. The two will form a weekly communication next season. These ships are about 1,200 tons each, unsurpassed in strength, in beauty of model and solidity of machinery. All the latest improvements will be in them which experience has suggested, and they will be entitled to succeed. They will cost $170,000 each, and are partly owned in Savannah.[24]

Eight days after *Cherokee* was launched, the keel of her sister ship, *Muscogee,* was laid. *Cherokee,* meanwhile, was completed by the specified date in September, underwent successful trials, and sailed from New York for Savannah on 5 October 1848. Her commander was Capt. Thomas Lyon, a native of Savannah. Lyon had previously been the master of the steamboat *William Seabrook* of the Daily United States Mail Steam Packet Line, which connected Savannah and Charleston.[25]

*Cherokee* arrived at Savannah on 8 October. She was enthusiastically greeted. As a visitor to Savannah at the time later remarked, "the prospective arrival of an ocean steamship at Savannah was a notable event in the history of the City, and great publicity was consequently given to it all over the State."

> I had never seen a steamship, and . . . there were hundreds who had never seen one either. Curiosity, therefore, led me and many others to come to the City from long distances to see her come in. It was certainly a very large crowd for so small a city as Savannah was at the time, which assembled on the bluff at the eastern end of Bay Street . . . where an unobstructed view of the river could be obtained for several miles. Some had binoculars, and some had old-fashioned collapsible spy glasses, all eager to catch the first sign of her smoke as she entered the river, and to follow it up until she came in near enough to be seen with the naked eye. She came in full speed, all colors flying, and to my youthful mind presented a very imposing spectacle.[26]

The Savannah *Georgian* noted the arrival of the "splendid new steamer" while the editors proudly stated, "We congratulate her enterprising stockholders who have made her the successful pioneer of steam navigation between this city and New York. . . ."[27] A special train from the Central Rail Road conveyed *Cherokee* passengers with inland connections to Macon. With the Central Rail Road and the New-York and Savannah Steam Navigation Company sharing stockholders, cooperation between the two steam transportation companies was not surprising.

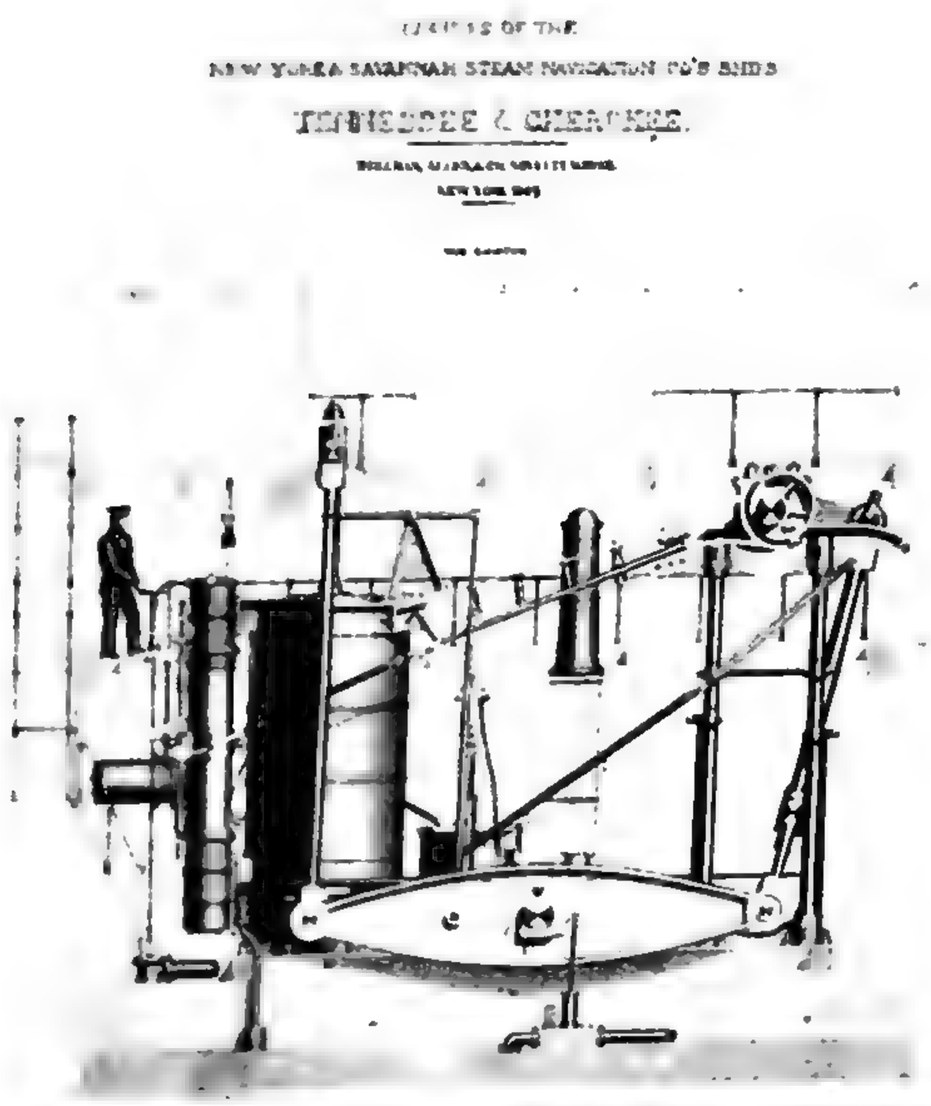
Padelford & Fay, in advertising *Cherokee*'s first departure from Savannah (on 11 October) noted that

> The facilities and advantages offered by this Line to the travelling public of Georgia, Tennessee, Alabama, and Florida, it is hoped will be tried and duly appreciated.
>
> Persons intending to take passage in this line are assured that the Central Rail Road Company will, whenever necessary, form a *Special Train* to meet the arrival and departure of the Steamers.[28]

They also noted that "The second Steamer of the line, the MUSCOGEE, will soon be launched, and will be ready early in the spring, so that one will leave New York and Savannah every Wednesday." While awaiting the arrival of the second steamer, Savannah settled into comfortable enjoyment of the city's new steamship line, assuredly a challenge to Charleston's line.

On 23 October 1848, the Savannah *Georgian* proudly announced that *Cherokee* had survived a "tempestuous gale" at sea; "her prow breasted the mountain billow with ease, while her machinery, with a giant's nerve, urged her steadily against the opposing elements. . . ." The editors of the *Georgian* crowed, "Savannah now has a steamer to which she can point as worthy of public confidence." The regular and rapid runs *Cherokee* made between New York and Savannah soon attracted

24. Bancroft, *Census* . . . , p. 41.
25. Ibid., p. 31.
26. Charles Seton Hardee, "Charles Seton Hardee's Recollections of Old Savannah," *Georgia Historical Quarterly* XII (December 1928), 378-79.
27. Savannah *Georgian*, 8 October 1848.
28. Savannah *Georgian*, 10 October 1848.




(Courtesy of the Smithsonian Institution, Washington, D.C.)

favorable attention elsewhere. The editors of the Fayetteville, North Carolina's *The North Carolinian* enviously reported that

> The Georgian says that the steamer Cherokee, a regular packet between Savannah and New York, arrived at the former place from New York, on the 1st April, which was *three days sooner* than the mail arrives there by land! How in the name of common sense can railroads and inland conveyances compete with such expedition as that? The seaboard railroads lose hundreds of passengers and thousands of the dollars to the coasting steamers. Nobody now thinks of going the land route from New York to Charleston, or any place south of it; whereas a few years ago, when the horrors of steamboat explosions were fresh in the minds of the people, the travel was all inland. But the comforts and luxuries of those northern and southern steam packets, together with the guards which science and experience have placed against explosions, have enticed nearly the whole travelling public.[29]

The wonder of the new age was the oceangoing steamship. *Cherokee* was a success and the directors of the New-York and Savannah Steam Navigation Company eagerly awaited the completion of their second steamer. In the summer of 1848, as the launch of the new vessel loomed, her name was changed. *Muscogee* was renamed *Tennessee*, no reason being given. Early in the fall of 1848, just prior to *Tennessee*'s October launching, advertisements in the Savannah newspapers recorded the New-York and Savannah Steam Navigation Company's confidence in William Webb's ability to have her ready on time: "after the 1st March next the Tennessee will be upon the route. . . ."[30] William Webb would keep his promise.

On 20 June 1848, just eight days after *Cherokee* slid down the ways, William H. Webb laid down the keel of *Muscogee*. Work on the ship progressed rapidly despite a fire in the shipyard which destroyed the mold loft, half-models, and some of the full-sized molds of the two steamers.[31] *Muscogee*, renamed *Tennessee* just prior to her launch, was built of "mixed unseasoned timbers," which were fastened with iron and yellow metal bolts, drifts, and spikes. *Tennessee* as built was 211 feet, 10 inches in length, with a 35-foot, 8-inch beam and a 22-foot depth of hold, registered at 1,275 tons (old measurement). Her lines were sharp fore and aft, with clipper bow with headboards and trailboards.

The ship was full-bodied amidships, having a nearly flat bottom with relatively little deadrise. The flat bottom was a decided asset on the Savannah run; the Savannah River was difficult to enter. A passenger on a packet entering the river in 1840 noted in a letter home that

> . . . we anticipated some trouble in passing the bar, for in our last war with Great Britain, to prevent the ascent of British ships up the river, our navy sank a row of vessels on the bar, reaching from one shore to the other, so that now all her majesty's ships are obliged to remain at sea and all her imports and exports are conveyed to and from her ships in boats. Our vessels can usually pass the bar, as they have lighter bottoms. . . .[32]

*Cherokee* and *Tennessee*'s near-flat bottoms meant light drafts; this enabled them to pass the bar without problem and also lessened the risks of running aground in the river, where shifting sandbars and snags had claimed many vessels.[33] The light draft also meant little

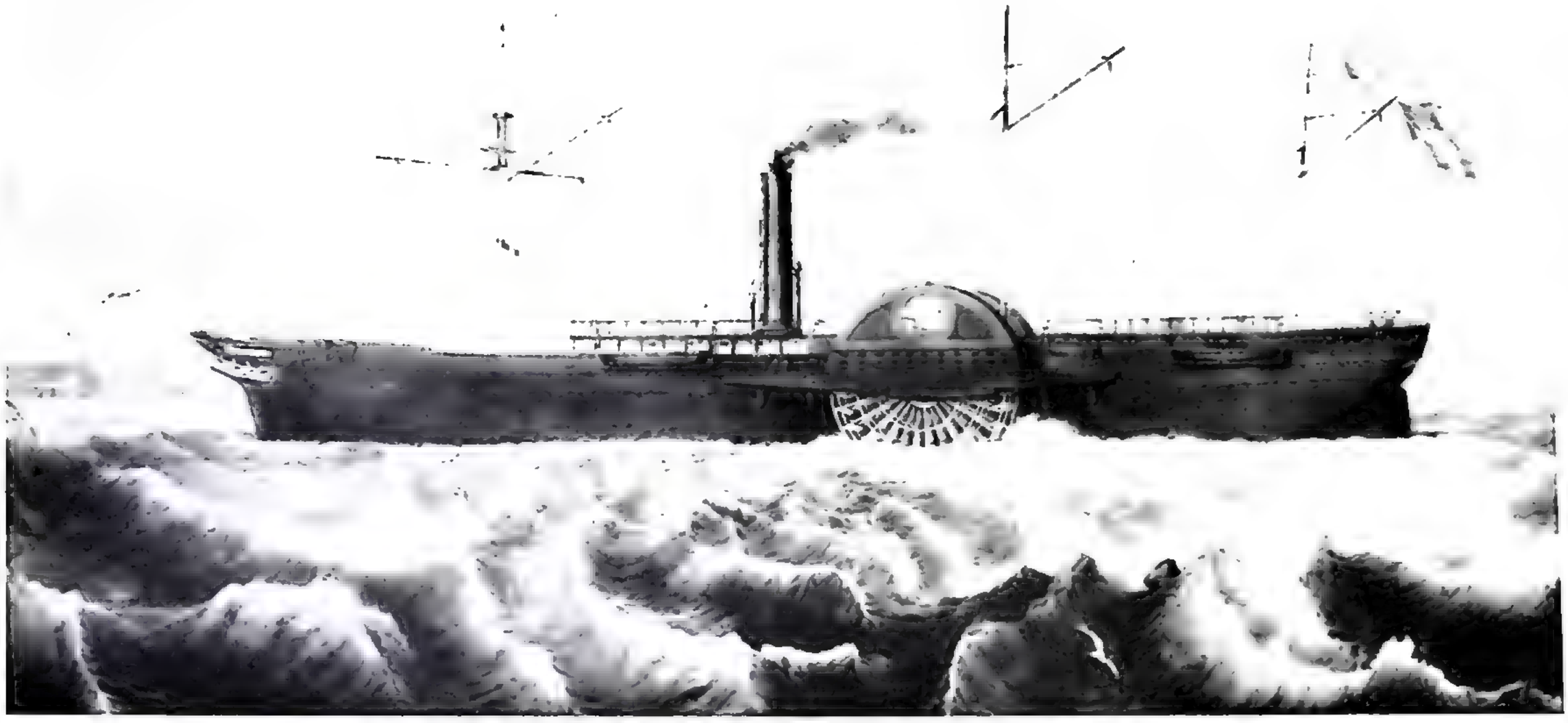
29. *The North Carolinian* (Fayetteville, North Carolina), 14 April 1849.

30. "Traveler's Guide," broadside tipped into Bancroft, *Census* . . . . copy at the Georgia Historical Society, Savannah.

31. William H. Webb, "Certificate Book," SS *Tennessee*, bound manuscript, Webb Institute of Naval Architecture. Also see Cedric Ridgely-Nevitt, *American Steamships on the Atlantic* (Newark: University of Delaware Press, 1981), p. 111.

32. Emily Burke, *Pleasure and Pain: Reminiscences of Georgia in the 1840's* (Savannah: The Beehive Press, 1978), pp. 5-6.

33. Ruby A. Rahn, *River Highway for Trade, The Savannah: Canoes,*



SS *Tennessee*. Original lithograph by Sarony & Major, New York, 1850. (Courtesy of the National Maritime Museum, San Francisco, California.)

variation in the loaded and unloaded profile of the vessel:

> The *Cherokee*, which is of the same model, is found to work admirably; her draught is eleven feet with cargo and coal in and rises but little at the end of the voyage, thus gaining a great advantage, both for speed and safety, by preserving the wheels at their proper emergence below the surface.[34]

*Tennessee*'s light draft was also a desirable feature at a time "when most American harbors were protected by natural sand bars and ships had to await high tides and favorable sea conditions before they could enter."[35]

The construction of *Tennessee*'s hull was superintended by a fifty-three-year-old, thirty-eight-year veteran of the Atlantic, Capt. John Collins. Collins, uncle of American transatlantic steamship entrepreneur Edward Knight Collins, was a veteran of the transatlantic packet trade.[36] After commanding a number of sailing packets to Liverpool, Collins had transferred to steam. *Tennessee* was his first steamship. Collins was pleased with the vessel. He was quoted as saying "a stronger or better built boat has not been made in our country."[37] William Webb was also pleased with the new steamer but voiced some disappointment over the bow. *Tennessee*'s machinery and paddlewheels were located seven feet farther forward of *Cherokee*'s. The bow had been filled out, but "the fore-body of this vessel was not full enough," making the bow four to six inches out of trim when *Tennessee* was fully loaded.[38]

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*Indian Tradeboats, Flatboats, Steamers, Packets, and Barges* (Savannah: United States Army, Corps of Engineers, 1968), p. 43.

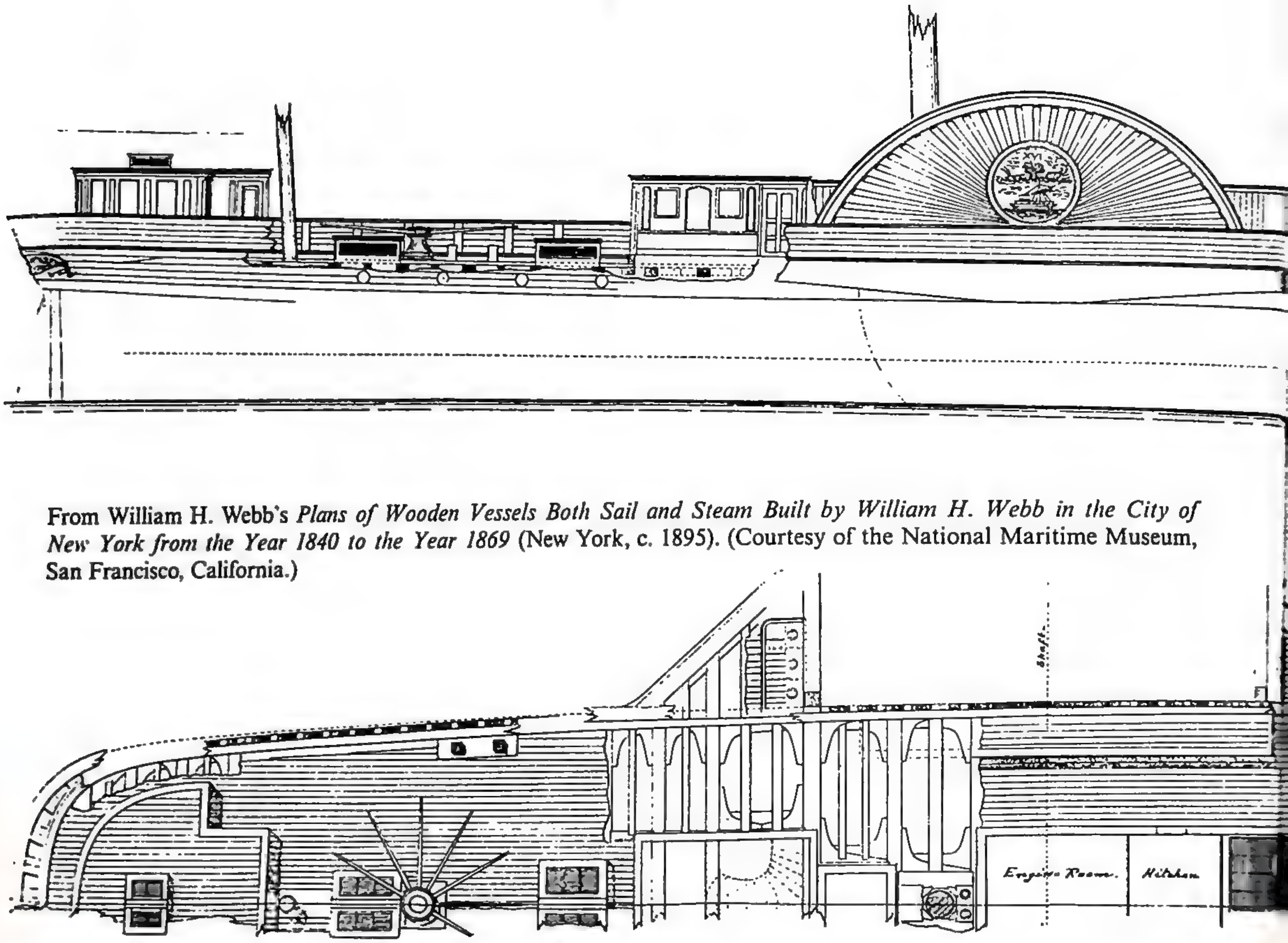
34. New York *Herald*, 26 October 1848.

35. Ridgely-Nevitt, p. 111.

36. John Collin's career is summarized in Albion, *Square-Riggers on Schedule* . . . , p. 334.

37. New York *Herald*, 26 October 1848.

38. William H. Webb, pencilled notes in his offset book. Bound manuscript, Webb Institute of Naval Architecture.




From William H. Webb's *Plans of Wooden Vessels Both Sail and Steam Built by William H. Webb in the City of New York from the Year 1840 to the Year 1869* (New York, c. 1895). (Courtesy of the National Maritime Museum, San Francisco, California.)

*Tennessee*'s impending launch was announced on 25 October 1848:

> LAUNCH OF ANOTHER STEAMSHIP
>
> The second steamer of the New York and Savannah line will be launched this morning at 9 o'clock, from the yard of Wm. H. Webb, foot of Sixth-st. East River. Her name is the Tennessee, and in connection with the Cherokee, already in successful operation, will form a weekly line between the two cities.[39]

The launch of the ship proceeded without delay:

> THE STEAMSHIP TENNESSEE was launched on Wednesday morning, sliding from her ways in a beautiful style, amid the enthusiastic cheers of a large number of spectators. She is regarded as a specimen of superior naval architecture, especially as regards strength and adaptation to unite speed with safety in rough seas. . . .[40]

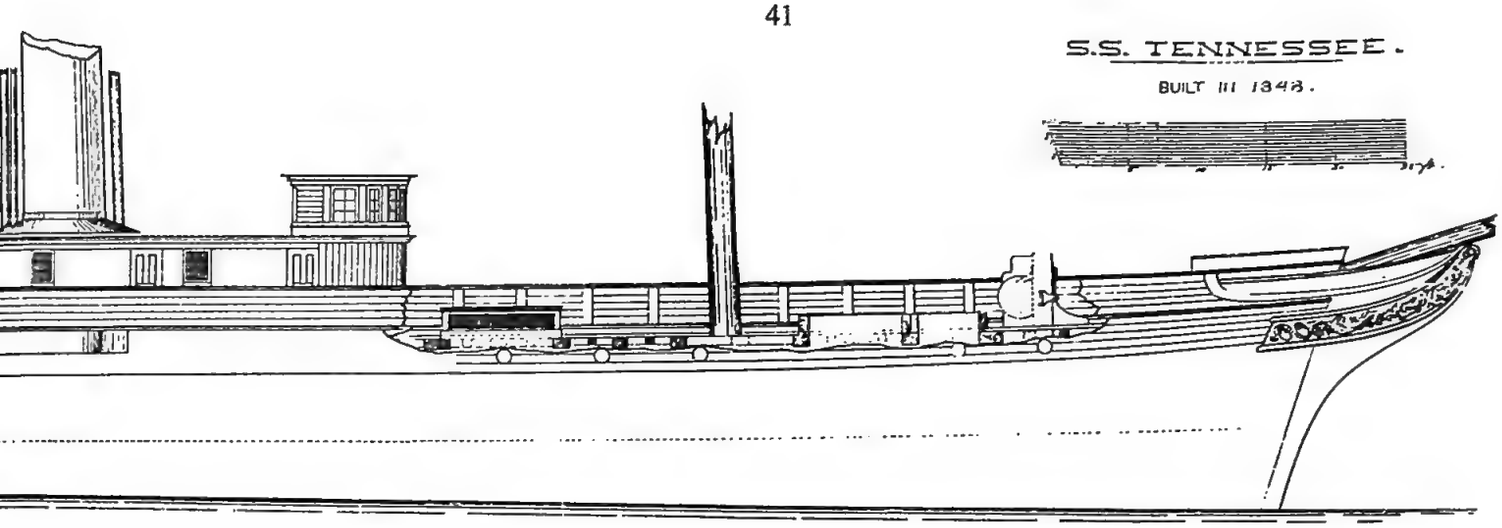
Following the launch, *Tennessee* was immediately towed down the East River to the wharf of the Novelty Iron Works of Stillman, Allen & Company, where she was to receive her engine, boilers, and other machinery.

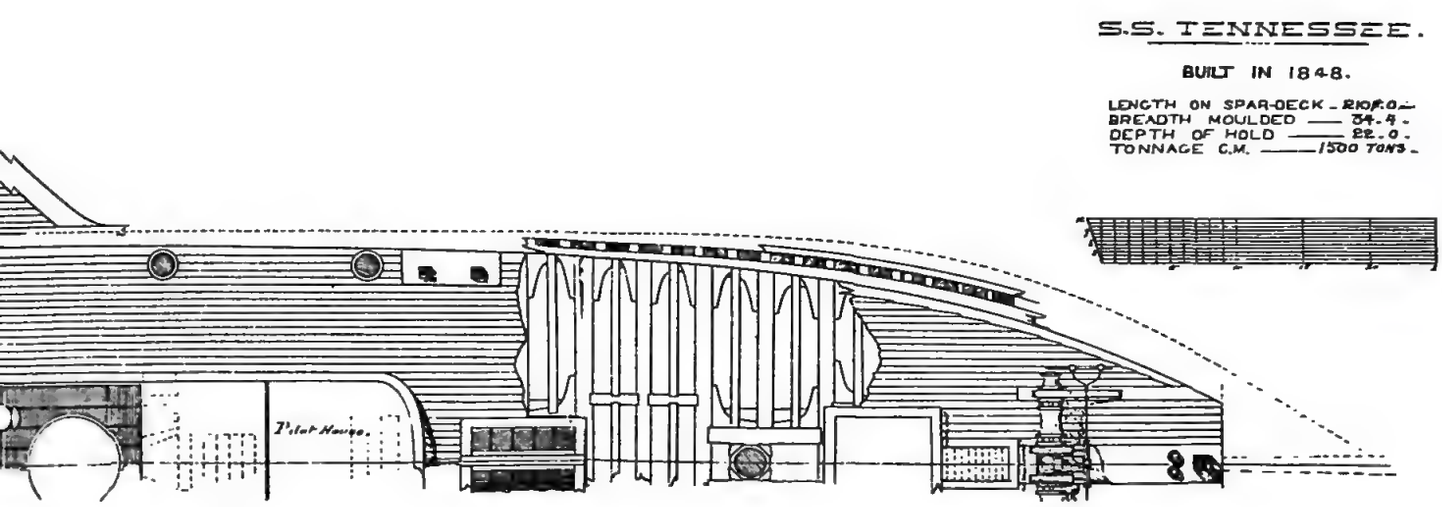
As the machinery was installed joiners worked to complete *Tennessee*'s passenger accommodations. The finished work was favorably commented upon by the New York press:

> The sofas, settees, and chairs are of modern style and elegant construction. The visible wood work of the cabins—which consists for the most part of panels and small columns—is veneered with rosewood and curled maple, polished to the

39. New York *Daily Tribune*, 25 October 1848.

40. New York *Daily Tribune*, 27 October 1848.




highest degree. The ventilation is excellent, and each state room is well lighted and furnished with water, which may be had for the drawing. The main cabins have large ventilators in the centre, so that fresh air may be admitted *ad libitum*. The space between decks is seven and one-half feet.[41]

Cabins for the officers were located on deck.

Work on the machinery was completed in March 1849 and *Tennessee* was readied for her trial run. On 16 March, *Tennessee* left the Novelty Iron Works just after 4:00 P.M. and ran down to Verazzano Narrows, where she turned and headed back to New York, arriving at 6:00 P.M. The trial was a success:

> . . . we were exceedingly well pleased with this vessel; her sailing, the working of her engines, and everything else connected with her. . . . In point of beauty in model, speed in sailing, easy control by helm, and the absence of all disagreeable or tremulous motion from the engine, she is, we think, unsurpassed.[42]

The editors of the New York *Herald* stated, "We will be much surprised if she does not become a favorite not only with the travelling public of the North, but our friends in the Southern states," and expressed the hope that she would "encourage and promote the mutual good understanding which has always existed between the North and South."[43]

News of *Tennessee*'s successful trial run reached Sa-

41. New York *Herald*, 17 March 1849.

42. Ibid.

43. Ibid.

vannah on 23 March, and the arrival of the new steamer was eagerly awaited. *Tennessee* was already on her way, having departed New York on the afternoon of 21 March with a full freight and sixty passengers; "she went down the bay in a style that satisfied all in any manner connected with her, and all those who had the pleasure of seeing her."[44] *Tennessee* arrived at Savannah on the morning of 25 March 1849. She was enthusiastically greeted by Savannah's citizens and was proclaimed "the model of grace and power. . . ."

> We have never looked upon these noble steamers, the Cherokee and Tennessee, so far excelling as they do all competitors upon the Atlantic coast, without realizing yet more deeply the debt of gratitude which the citizens of Savannah especially, as indeed, of the travelling public generally, owe to the enterprising projectors of the line.[45]

A substantial area of the South would ultimately be served by the New-York and Savannah Steam Navigation Company and the cooperating railroads: "This line is now patronized by New Orleans travellers, and also those going to Florida, Alabama, and Tennessee, with which places the railroad communication from Savannah is now nearly complete."[46]

*Tennessee* carried a variety of items, many of them European goods transhipped from Liverpool packets, to Savannah. On 27 March, Savannah merchants advertised the sale of "muslin collars, cuffs . . . white goods, nainsook, mull, checked and striped cambrics . . . per steamer Tennessee."[47] Other fabrics were also carried:

> BARAGES, GINGHAMS, &c---Per Steamer Tennessee. Printed and satin striped Barages; French Muslins and Lawns; Scotch and French Ginghams; Printed Silk Albanum; Black Plaid Lawns; French and English Prints, &c. &c. For Sale By
>
> LATHROP & FOOTE[48]

Finished goods were also sold, including "a large assortment" of parasols. *Tennessee* carried high freight goods.

*Tennessee* was advertised to sail from Savannah on Wednesday, 28 March for New York:

> The new and splendid Steamship TENNESSEE, Collins master, will leave Savannah as above.
> Passage to New York. . . . . $25
> No Berth secured until paid for. The ship and owners will not be accountable for any article sent on board, unless Bills of Lading signed by the clerk on board. The ships of this line carry a clear White Light at mast-head; Green on starboard side and Red on Larboard.
> No Colored persons will be allowed to go on board for any purposes.
> No freight received after six o'clock on day of sailing. For Freight or Passage apply to
>
> PADELFORD & FAY[49]

Blacks were probably not allowed on board the vessel because of fears of fugitive slaves. In 1848, 41 percent of Savannah's population were slaves, indicating the city's commitment to the "peculiar institution." Savannah's blacks, free and slave, were not denied access to all vessels; in 1848 there were two free black engineers on steamboats and four slave pilots.[50] Access to *Cherokee* and *Tennessee* was denied since the steamers ran to New York, a free state.

*Tennessee* departed Savannah at the appointed hour, and was accompanied down the river by the steamer *Metamora,* which carried a large number of spectators "anxious to watch her on her exit from our harbor . . ." while the bluff overlooking the river "was lined with citizens observing her departure."[51] On 1 April 1849, *Tennessee* arrived back at New York. The memoranda of her short voyage indicates what was to be her usual route and some of the sights that could be seen:

> March 29, off Cape Look Out, passed brig Tybee, hence for Charleston. 30th, 11 A.M., a little S of Cape Henry, passed the wreck of a vessel bottom upwards, painted green, apparently not long in that condition; could not see her name, supposed a vessel of 275 tons. Same day, 4 P.M., passed 8 miles to leeward of a herm[aphrodite] brig, with heads of main and foremast and jibboom carried away, standing North, under fore and main sails. Same day, 12 at Noon, lat 30 40, passed Steamer Cherokee, Lyons, bound for Savannah. . . . Off Capes of Virginia passed a bark showing a white signal with black cross.[52]

After a short turnaround in New York, *Tennessee* was ready to sail for Savannah on 4 April. Thereafter

44. New York *Herald*, 22 March 1849.
45. Savannah *Georgian*, 29 March 1849.
46. New York *Herald*, 26 October 1848.
47. Savannah *Georgian*, 27 March 1849.
48. Ibid.
49. Savannah *Georgian*, 27 March 1849.
50. Bancroft, *Census* . . . , p. 16.
51. Savannah *Georgian*, 29 March 1849.
52. New York *Herald*, 1 April 1849.

*Tennessee* sailed every Wednesday from Savannah and New York, alternating with *Cherokee*:

FOR SAVANNAH—The new and splendid ocean steamers of the New-York and Savannah Steam Navigation Company, will leave on Wednesday of every week, at 4 o'clock, from Pier No. 4, North River.

TENNESSEE, Capt. Collins . . . . . 2d May
CHEROKEE, Capt. Lyon. . . . . 9th May
TENNESSEE, Capt. Collins . . . . . 16th May

For freight or passage apply at 194 Front street, to
SAM'L L. MITCHILL[53]

The regular departures of the two steamers delighted Savannah's citizens; "We are pleased to see that the Tennessee is becoming fully as popular as that universal favorite 'the Cherokee,' and that the admirable management of this line has already secured the confidence of the travelling public. . . ."[54]

In June 1849 the New-York and Savannah Steam Navigation Company made a contract with the Post Office Department to carry a portion of the United States mail in their steamers. Under the provisions of the contract, the company was to provide for the safe passage of the mail to and from New York and Savannah. The company received eight dollars per ton of mail delivered. Special trains, if necessary, would be supplied by the Central Rail Road to carry mail from the steamers inland.[55] Mail for the steamers could be deposited at the post office up to a half-hour prior to sailing.

The runs between New York and Savannah passed without notable incidents such as accident, postponements, or unusual delays. "The success of a steamship can be judged by the lack of news about her. . . ."[56] Memoranda in the marine news occasionally noted adverse weather: "The T[ennessee] has experienced a continuous succession of NEasterly gales since her departure from Savannah, and has proved herself an excellent sea boat."[57] After arriving at New York on 8 July 1849, Captain Collins left *Tennessee* to join his nephew's transatlantic steam line as marine superintendent.[58] In his place Capt. George A. Cole assumed command of the ship. *Tennessee* continued to successfully run to Savannah:

FOR SAVANNAH—U.S. MAIL LINE—The superior steamer TENNESSEE, Capt. Geo. A. Cole, will leave on Wednesday afternoon, at 4 o'clock, from Pier 4 North River. Passage—Cabin $25; Steerage $9. . . . No quarantine at Savannah on vessels from New York—Railroads from Savannah to the interior of Georgia and Tennessee, leave Savannah every day.[59]

*Tennessee* was withdrawn from the New York and Savannah run in October 1849, after her fifteenth voyage, having been sold to new owners. Howland and Aspinwall of New York purchased the ship from the New-York and Savannah Steam Navigation Company for $200,000. *Tennessee* was to join Howland and Aspinwall's Pacific Mail Steamship Company's fleet. News of the sale of the ship was met with disappointment in Savannah:

Our citizens will learn with regret, the sale of this splendid steamer. Thus our weekly line of sea steamers to New York, just successfully established, is for the present to become a semi-monthly line. We are informed that the company have made arrangements for the building of a steamer to take the place of the Tennessee, and which will be ready for sea sometime in May next.[60]

The New-York and Savannah Steam Navigation Company realized a $25,000 profit on the sale of *Tennessee*, notwithstanding any profits made on her fifteen voyages.[61] This may have inspired them to also accept an offer for *Cherokee* shortly thereafter from Howland and Aspinwall, who intended to run her on the Atlantic between Chagres (Panama) and New York. *Cherokee* operated between those ports, first for Howland and Aspinwall, later for George Law's United States Mail Steamship Company. By 1852 she was running between New York and New Orleans. On 26 August 1853, she caught fire while loading at New York and burned to the waterline. Her hulk was pumped out and languished until 1858, when she was either dismantled or abandoned.[62]

53. New York *Herald*, 1 May 1849.
54. Savannah *Georgian*, 12 April 1849.
55. "Registers for Star Route Contracts, 1814-1960," Georgia, 1847-1850, Records of the Post Office Department, Records Relating to the Star Route Service, National Archives Records Group 28, Washington, D.C.
56. Ridgely-Nevitt, *American Steamships on the Atlantic*, p. 112.
57. New York *Herald*, 5 August 1849.
58. Albion, *Square Riggers on Schedule*, p. 334; New York *Herald*, 8 and 12 July 1849.
59. New York *Herald*, 8 August 1849.
60. Savannah *Georgian*, 15 October 1849.
61. New York *Daily Tribune*, 10 October 1849.
62. *Cherokee*'s career is summarized in John Haskell Kemble, *The*

*Tennessee* sailed from Savannah for the last time on 17 October 1849. She arrived at New York on 20 October:

> This fine steamer . . . arrived yesterday evening, after a passage of 70 hours from Savannah, having been detained beyond her usual time by head winds and heavy seas. This is the last trip of the Tennessee, prior to her transfer to Messrs. Howland & Aspinwall, who intend to place her in the Panama and San Francisco line.[63]

*Tennessee* steamed up the East River to William Webb's yard, where the ship was to be altered for her new owners. She would soon depart for the Pacific, swept up in the mania of the California Gold Rush.

*James P. Delgado, a historian for the National Park Service, also works as a maritime archaeologist. He has worked as a historian for the USS* Monitor *project, and as a marine archaeologist on a number of projects, including the wrecks of the 1848 steamer* Tennessee, *1850 steamer* Winfield Scott, *1856 ship* King Philip, *1882 two-masted schooner* Neptune, *and 1886 four-masted bark* Goldenhorn. *Delgado has had articles published in* California History, The Log of Mystic Seaport, Pacific Historian, *the* Huntington Library Quarterly, *and* The American Neptune.

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*Panama Route*, passim, and in Ridgely-Nevitt, pp. 113-14. The New York *Herald* of 27 August and 1 September 1858 discusses the fire on the ship.

63. New York *Herald*, 21 October 1849.

# Tankers in the Patuxent: The ESSO Fleet Lay-Up Site in the 1930s

MERLE T. COLE*

THROUGHOUT the 1930s, a significant portion of the world's largest tanker fleet lay idle in the Patuxent River near Solomons, Maryland. As the company history summarizes, "the tankers had difficulty in adjusting to the ups and downs of the oil industry in the late 1920s and the 1930s."[1]

## I. THE ESSO FLEET

In the earliest major case of "divestiture," the United States Supreme Court handed down its famous 1911 decision ordering the mammoth Standard Oil Company to dissolve. Among the many separate, but similarly named, companies emerging from the dissolution was the Standard Oil Company of New Jersey (incorporated in Delaware). This entity was most commonly referred to by shorter names such as "Jersey Standard," the "Delaware Company," and—after 1923—"ESSO." The latter was formed from the initial letters of "Standard Oil."[2]

Jersey Standard started its new life facing an acute shortage of tanker tonnage, and relied mainly on chartered vessels and those of the Deutsch-Amerikanische Petroleum-Gesellschaft (DAPG), a German affiliate, to transport the company's crude and refined petroleum products. Not until 1913 were the company's first tanker hulls laid down. These ships, the *William Rockefeller* and *John D. Archbold,* joined the fleet the next year. With the outbreak of World War I the company's Foreign Shipping Department, which managed all marine operations, gained control of DAPG vessels interned in neutral American ports and "almost overnight the company fleet expanded from two to twenty-eight tankers." Additional tonnage was constructed to meet subsequent wartime needs, so that by 1917 Jersey Standard owned forty-one tankers, "more than a quarter of all American-register tankers afloat at the time."[3]

The Jersey fleet—defined as "the tankers of affiliates in which the parent company owned the majority of the stock"—was in excellent condition after the war, notwithstanding the loss of both of its two original tankers to enemy action.

> Half the 44 vessels sailing under the Jersey flag [in 1919] were less than three years old; 27 other tankers were owned by affiliates. This combined fleet of 71 ships was the second largest privately owned tanker fleet afloat, being surpassed only by the Royal Dutch-Shell armada of 100 vessels.[4]

The reference to tanker age is significant because "repairs were so heavy in a vessel's fifteenth year that one of that age was considered to be virtually worn out."[5] The huge size of the Delaware Company's fleet

* Interviews and questionnaires were used extensively to gather data for the second part of this article, since ESSO company records pertaining to the Solomons site were apparently purged some years ago. Special thanks are due to Bobby M. Pouncey of Solomons, Maryland, who provided invaluable assistance by supplying the names of men familiar with operation of the lay-up site. Much of the credit for completion of Part II must go to Bobby and his support of this project.

1. Henrietta M. Larson, Evelyn H. Knowlton, and Charles S. Popple, *New Horizons, 1927-1950,* vol. 3 of *History of Standard Oil Company (New Jersey)* (New York, 1971), 204.

2. See *Standard Oil Company of New Jersey v. U.S.,* 221 U.S. 1, 31 Sup. Ct. 502 (1911). This paper makes no attempt to differentiate between the many "Standard Oils" existing in 1911 and later. For a study of company naming practices, see Paul H. Giddens, "Historical Origins of the Adoption of the EXXON Name and Trademark," *Business History Review* 47 (Autumn 1973), 353-66.

3. George Sweet Gibb and Evelyn H. Knowlton, *The Resurgent Years, 1911-1927,* vol. 2 of *History of Standard Oil Company (New Jersey)* (New York, 1956), 153-64.

4. Ibid., 472. The definition is from Larson, Knowlton and Popple, 204.

5. Larson, Knowlton and Popple, 210.

is evident in the following comparison[6] with other fleets in the petroleum industry:

| *Company* | *No. Tankers* |
|---|---|
| Standard of New York | 33 |
| Anglo-American | 29 |
| Anglo-Persian | 24 |
| Gulf Oil | 22 |
| Pan American | 20 |
| Texas Company | 15 |
| Burmah Oil | 10 |
| Standard of California | 10 |

Immediately after the war, the world witnessed an international shipping boom of unprecedented intensity. Many companies, including Jersey Standard, placed orders for thousands of deadweight tons of new vessels. (Deadweight tonnage is the difference between a vessel's loaded and light displacement tonnage, i.e., the ship's capacity, in long tons.) Then in 1920 the bottom fell out, ushering in a shipping depression which prompted the company to consider selling some of its older fleet units.[7]

In April 1920, Jersey Standard appointed a shipping committee to study ways to improve administration of its marine operations. David T. Warner, head of the Foreign Shipping Department, served as committee chair until replaced in both capacities by Robert L. Hague in July. Hague had been marine superintendent for Standard Oil of California until 1918, and thereafter chief of the United States Shipping Board's construction and repair division. Under Hague's management, the newly renamed Marine Department undertook a series of economy and efficiency measures to reduce fleet operating costs.[8]

It was an uphill battle as the shipping depression ground on into 1921. Fleet management problems were exacerbated by delivery of ten new tankers, contracted for in the boom period immediately after the war. Jersey Standard had no alternative but to lay up part of its fleet, and twelve tankers were idle by the fall of 1921, at a cost of $1,090,000. This dreary situation carried over into the next year, but losses from the twelve laid-up ships were reduced to $126,600 "by utilizing the vessels for floating storage of oil." In 1923 the situation dramatically reversed, and the idle tankers were "emptied of their stored cargoes and dispatched to California to participate in the oil rush there."[9]

On 1 October 1927, the Jersey fleet comprised ninety-two tankers—oceangoing, coastal, and inland deepwater. "By far the largest fleet of a single affiliate, in both numbers of ships and tonnage, was that of Standard Shipping, consisting of thirty-eight tankers, of 481,000 tons, flying the flag of the United States." Next came the thirteen tankers (161,000 tons) of the Baltisch-Amerikanische Petroleum-Import-Gesellschaft, mbH ("Bapico"), based in the Free City of Danzig; Imperial, fifteen tankers of 113,000 tons, under British registry; twenty-two other vessels (195,000 tons) owned by eight European Continent affiliates; and four small tankers (10,000 tons), under Peruvian, Argentine, and Dutch registry. Despite the vast scale of this fleet, Jersey Standard exercised only broad policy guidance, and "the affiliates were left to manage their own shipping affairs."[10]

> Standard Shipping . . . principally carried crude oil and products for Jersey affiliates between ports on the Gulf and Atlantic coasts of the United States. Its ships brought crude oil from Humble tanker terminals to Jersey refineries on the Atlantic Coast or products from Baytown and Baton Rouge for Standard Oil Company of New Jersey to sell in its markets.[11]

The official company history records that 1920-1927 were "outstanding years for the Jersey Marine Department."[12] But the seemingly bright future of petroleum transportation was shattered by the onset of the Great Depression.

> The demand for tanker tonnage reached a peak in 1929 and stimulated the building of new ships. The business depression in 1930 and radical changes in tanker movements quickly created a surplus of tonnage.[13]

The situation was again inflamed by delivery of new ships, on the order of a million deadweight tons, and

6. Gibb and Popple, 472.

7. Ibid., 472-73; Harvard University, Graduate School of Business Administration, *The Use and Disposition of Ships and Shipyards at the End of World War II: A Report Prepared for the United States Navy Department and the United States Maritime Commission, June 1945* (Washington, 1945), 236.

8. Gibb and Knowlton, 476.

9. Ibid., 477-79.

10. Larson, Knowlton and Popple, 204-5, 208. See also *The Lamp* 22 (October 1939), 12. *Lamp* was the SONJ house organ.

11. Larson, Knowlton and Popple, 205-6.

12. Gibb and Knowlton, 481.

13. Standard Oil Company of New Jersey, *Report of Standard Oil Company (New Jersey) for the Year Ended December 31, 1930* (New York, 1931), 5. These annual reports, issued in May of the following year, are cited hereafter as *SONJ Annual Report*, by year.

by the purchase of Beacon Oil Company, which added six tankers. In 1929 the company was finally driven to impose "better coordination of the affiliates' tanker utilization and chartering. . . ." By the end of 1930, Jersey Standard had "a tied-up surplus of 1,500,000 deadweight tons"—twenty-two U.S. flag and five foreign tankers. The tankers were laid up "if they could not earn at least enough to cover their variable, or out-of-pocket costs." The company could have opted to avoid the economic roller coaster by retaining only a small fleet and chartering ships to meet the rest of its transport needs. But management explained to stockholders its belief that "ownership of tanker tonnage adequate to handle the greater part of the movement of its products is in the interest of its manufacturing and distributing business."[14] Accordingly, the company was faced with the prospect of potential long-term tanker lay-up in response to market fluctuations.

One estimate held that about a quarter of the world's tankers were idle in 1931. But "concentration on efficiency" netted "an actual saving" in the cost of Jersey marine operations that year. In May 1932, Jersey Standard bought 95.8 percent of the Pan American Foreign Corporation's capital stock. This purchase added substantially to "subsidiaries' reserves of crude oil in Venezuela and Mexico," as well as acquiring "a large refinery at Aruba. . . ." In the same year "consumption of lubricating oils . . . showed a marked loss," and the company experienced the first-ever decline of gasoline sales in the United States. Somewhat ironically, the Pan American properties included twenty-seven ocean-going and twenty-five small tankers (the latter used primarily to haul crude oil from Lake Maracaibo wells to the Aruba refinery), swelling the Marine Department inventory at a time when an average of twenty-five tankers were tied up. Lesser numbers of ships were also added by purchase of Huasteca Petroleum Company, Anglo-American Oil Company, Ltd., and Lago Shipping Company, Ltd., during 1932.[15]

In 1933, seven new tankers were added to the fleet, but the average number idle was reduced to seventeen. This improvement

came with the increased demand for petroleum products and the commencement of a large movement of fuel oil from California to U.S. North Atlantic ports in the fall of 1933. This longer voyage replaced the short run from the U.S. Gulf to North Atlantic ports and absorbed a greater quantity of tonnage.[16]

Demand for petroleum products remained high during 1934, when movement of 167.7 million barrels "set a new high record for the oceangoing fleet." Shipments of fuel oil from California "continued in large volume. . . ." Because of these trends, "All our tankers in suitable condition were kept fully employed, and freight rates remained steady. . . ." The company could also report stability and improved earnings throughout 1935, coupled with growing concern over an aging tanker fleet. The evident need for an extensive construction program was tempered by the fact that, under existing national maritime policy, the coastwise shipping primarily engaged in by the Delaware fleet was "restricted to vessels constructed in American yards and flying the U.S. flag." American-built and registered vessels entailed considerably greater expense than the foreign-built, foreign flag tankers used by Jersey's nineteen affiliates. Two major changes occurred in the Jersey fleet during 1935. On 31 May, the Bapico fleet was transferred from Danzig to Panamanian registry, reflecting growing concern over Nazi intentions. The newly created Panama Transportation Company joined Jersey as an affiliate.[17] On 1 December, Standard Shipping Company and the marine properties of Pan American Foreign Corporation merged with Jersey Standard's Marine Department, with Hague as general manager.[18]

At the end of 1936 Jersey Standard's fleet aggregated 191 tankers, at over 2 million deadweight tons—14 percent of the world's total. But increased demand for petroleum products was such "as to absorb all of the world's supply of tanker tonnage," and Standard resorted to time chartering to reinforce its already enormous capacity. "By the middle of [1937] all serviceable tankers were in operation and freight rates reached the highest level since 1930." Increasing world tension was evidenced by the company's agreement to participate in a "national defense tanker program" sponsored by

14. Ibid., 5-6; Larson, Knowlton and Popple, 210-11, 213-14, 220.

15. *SONJ Annual Reports, 1931*, 5, *1932*, 3-5, and *1933*, 5; Larson, Knowlton and Popple, 212-13.

16. *SONJ Annual Report, 1933*, 3-5.

17. Larson, Knowlton and Popple, 215-16.

18. *SONJ Annual Reports, 1934*, 3-4 and *1935*, 3-5; Larson, Knowlton and Popple, 217; *Lamp* 18 (October-December 1935), 5 and 22 (October 1939), 12; Charles Sterling Popple, *Standard Oil Company (New Jersey) in World War II* (New York, 1952), xxiv-xxv.

[illegible] Maritime Commission [illegible] against [illegible] tankers importing special [illegible] to [illegible] privileges. The Maritime Commission funded the cost of these special features.

The petroleum industry suffered again in 1938 because of decreased production and increased production costs. For the tankers, "substantially lower freight rates came into effect and prevailed throughout 1938 . . ." In that year ESSO added six oceangoing tankers to its fleet, but agreed to a Maritime Commission request to sell four of the new "national defense" vessels to other operators.[20]

Tanker rates were at a low level during the early part of 1939 and then increased sharply as a result of the marine strike. During the summer, the strike having been terminated, rates receded to those prevailing early in the year. The outbreak of war [1 September] stimulated chartering and all serviceable tankers were again placed in operation.[21]

Tanker shortages and higher freight rates developed in response to slower voyages to Europe resulting from the convoy system, and "heavy movement coastwise of heating oil due to the [unusually] severe winter." But despite the convoys, "hampering government regulations, and the sinking of tankers," industry earnings were greatly improved in the first year of war. ESSO took delivery of four new tankers (two from the "national defense" program), while foreign affiliates lost four ships to submarines and mines.[22]

ESSO had planned to scrap several "older and less efficient ships, some of which were laid up," but decided in the face of the tanker shortage to recondition the vessels, which were then "transferred to foreign registry and placed in operation." Between October 1939 and February 1940, the Maritime Commission authorized ESSO to transfer fifteen old tankers to the affiliate Panama Transportation Company. This transfer to neutral registry permitted continued delivery of petroleum products to Great Britain and France, particularly after the Proclamation of Neutrality on 1 November 1939 imposed severe restrictions on American-flag operations in Europe.[23]

The year 1940 started with a tanker shortage in the face of increased demand. But by mid-year, the French, Low Countries, and Norwegian markets were closed by German occupation, and Italy entered the war as a belligerent. ESSO again faced a surplus tonnage situation, and began laying-up ships in June. By September, thirty-four tankers were idled. Domestic demand soon took up the slack from export losses, with the approach of winter and quickening pace of industrial activity. The resultant "exceptionally heavy" demand caused "all of Jersey's vessels [to be] restored to active duty." Tanker shortages continued due to the "high rate of sinking and the additional time required for deliveries within the war zone as a result of the convoy system" (estimated as taking "about twice as long").[24]

By this time, foreign affiliates had lost eighteen tankers and suffered five more seriously damaged. To maintain a maximum number of ships in operation, ESSO was forced "to carry out extensive repairs to some of our older vessels which, under peace time conditions, would probably have been scrapped."[25]

The following table, showing growth of the ESSO fleet, is based on data from the company's annual reports:

| *Year* | *No. Tankers* | *Deadweight Tons* |
|---|---|---|
| 1926 | 74 | 854,522 |
| 1927 | 92 | 959,000 |
| 1928 | 101 | 1,050,000 |
| 1929 | 118 | 1,250,000 |
| 1930 | 147 | (Not available) |
| 1931 | 145 | 1,548,424 |
| 1932 | 196 | 1,957,027 |
| 1933 | 200 | 2,057,488 |
| 1934 | 194 | 2,027,617 |
| 1935 | 190 | 1,987,000 |
| 1936 | 191 | 2,020,000 |
| 1937 | 200 | 2,105,000 |
| 1938 | 206 | 2,155,000 |
| 1939 | 205 | 2,186,530 |

## II. The Patuxent Lay-Up Site

ESSO's major lay-up site was located in the Patuxent, which afforded numerous natural advantages as a long-term mooring point, and had been used by the Shipping Board (and its successor, the Maritime Commission) since 1927. The government leased a strip ashore running eastward from Point Patience, just north of the

19. *SONJ Annual Report, 1936*, 7-8, and *1937*, 5-6.
20. Ibid., *1938*, 2, 5.
21. Ibid., *1939*, 5.
22. Ibid., 2, 5.
23. Ibid., 5; Popple, 188-90; Larson, Knowlton and Popple, 392-93.
24. *SONJ Annual Report, 1940*, 3, 7; Popple, 188-90.
25. *SONJ Annual Report, 1940*, 7.

town of Solomons. The lease was subsequently included in a Navy Department land acquisition, and is now part of U.S. Naval Recreation Center, Solomons.[26]

The Maritime Commission kept a maximum of six ships at Point Patience, but ESSO's needs were far greater in terms of both physical space and local labor required to work on the idle tankers. The chosen spot was Millstone Landing, a steamboat dock situated roughly between the present east and west seaplane basins of U.S. Naval Air Station, Patuxent, about a mile SSW of Fishing Point and 1.5 miles SSE of Sandy Point (the southern tip of Solomons Island). The site was just inside the mouth of the Patuxent River, where the river empties into Chesapeake Bay, and provided adequate draft except where shoals ran north from Fishing Point and Hog Point, on the southern shore. Millstone Landing had been a major covert operations center for Confederate smugglers during the Civil War. The land behind the lay-up site was thickly wooded, broken only by a few widely scattered houses, and remained undeveloped until taken by the navy in World War II as an aviation test center. Although isolated, the site was "near Baltimore for repair facilities, ship supplies and convenient for transfer of personnel."[27]

The number of tankers laid-up at Millstone Landing varied between twenty and forty over the years, in response to fluctuating demands for crude oil, and resultant freight rate changes. Apparently, when more than twenty ships were present, they were divided into two groups, moored about two hundred yards apart. The tankers were not docked or tied to the shore, but rather placed in the stream and cabled together, "Parallel, side by side, [alternately] bow to stern, anchors ahead, mooring lines as needed." Deck watchmen were on duty as the officer in charge was "very strict about safety and security" of the vessels.[28]

The lay-up site was organized along the lines of a ship at anchor. The small SS *Ethyl* had been "stripped to a hull and floating boat house—galley, mess hall, bunks for about 265 men," to serve as "mother ship" of the fleet. The senior unit was the Deck Department, which engaged primarily in such maintenance work as scaling, painting, and rigging. The first department head was a Captain Grunnah, followed by Captains A. C. Steinmuller and (in 1938) Fred Marcus. Next in importance came the Engine Department, led in turn by Emil Cordsen, Edward J. Chadbourne, and Lawrence B. Jones. This unit was occupied "mostly [with] installation of the Butterworth Tank Cleaning System" on ships coming into lay-up. Conversion from crude oil to gasoline carriage required meticulous cleaning of storage tanks. The Butterworth system was a means of "pumping hot salt water under pressure into the tanks to remove deposits." Standard Oil estimated that the system saved $85,000 on forty-seven major cleaning jobs throughout the fleet during 1931. The last major division was the Steward's Department, which was responsible for provisioning, messing and living quarters for tanker crews. Overall command of the site was vested in a port engineer, a post held first by Guy L. Bennett, then by Chadbourne. This officer reported directly to H. J. Esselborn, manager of the Operations Division at the home office in New York City.[29]

In its earliest days, the lay-up site employed about one hundred workers. These were mainly fleet crewmen retained as an alternative to layoff, and to provide an element of security. Fleet employees were supplemented by a "crew of shipyard workers from Baltimore to take care of the burning, welding, etc. in the installation of the Butterworth System." Much of the engine and pump repair work beyond the capability of fleet equipment was trucked to "Buck" Lynch's machine shop in Baltimore. The small number of "locals" employed at the site increased until they constituted the bulk of a three-to-four-hundred-man workforce in later years.[30]

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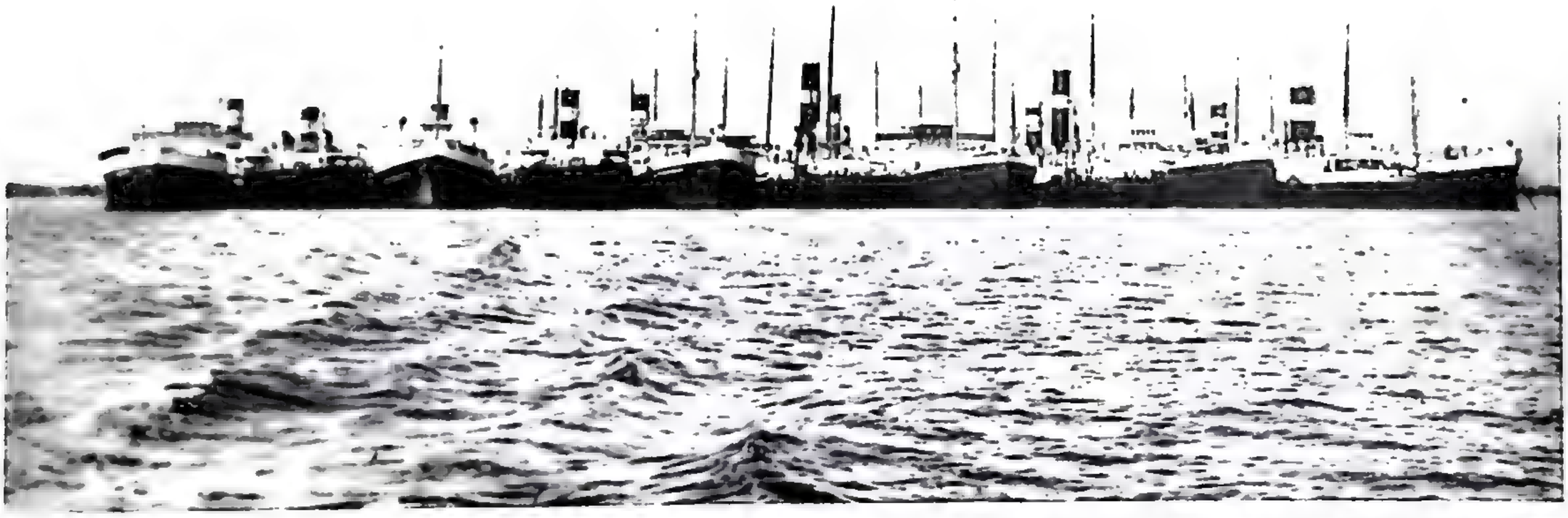
26. Merle T. Cole, monograph, *The Patuxent River "Ghost Fleet," 1927-1941* (Solomons, Md., 1986).

27. Interview, Clyde C. Taylor, 13 July 1985. Taylor arrived at Millstone Landing in a snow squall in March 1933. His ship, the 11,365-d.w.t. *I. C. White*, was hung up on the bar at the entrance of the river for several hours. Regarding Confederate activity, see Sec. of the Navy Gideon Wells to Sec. of State William H. Seward, 8 July 1861, quoted in Edwin W. Beitzell, *Life on the Potomac River* (Abell, Md., 1968), 38. Early development of the aviation test center is summarized in War Records Div., Maryland Historical Society, *Military Participation*, vol. I of *Maryland in World War II* (Baltimore, 1950), 206-7. The quote is from Adolv Larson to author, August 1985.

28. Taylor interview; Linwood Thomas, Victor Dingle, and Thomas F. Smith to author, August 1985; Dr. Page C. Jett to author, July 1985. The quotes are from Larson to author. These men worked at the site at various times during the decade 1930 (Smith) to 1940 (Dingle). Dr. Jett was a medical consultant and advisor there. Thomas reports that tankers were grouped twenty-nine in one fleet and ten to eleven in the other, "under Panamanian flag."

29. William B. Vautrinot to author, 1 November 1985; John S. Conaghan to Vautrinot, 28 October 1985; Taylor interview; Larson, Thomas, and Smith to author; Larson, Knowlton and Popple, 210. For organization of the company home office, see Standard Shipping Company (Incorporated in Delaware), *Marine Regulations* (New York, 1933), 9.

30. Thomas J. McTaggart to author, 29 October and 1 November



Mothballed ESSO Tanker fleet, Patuxent River, Maryland. Group No. 1, 1930-1931, left to right: *L. J. Drake, Beaconhill, Beaconstar, Beaconoil, Benjamin Brewster, Christy Payne, W. H. Libby, Livingston Roe, M. F. Elliott, W. H. Tilford,* and *Thomas H. Wheeler.* (Courtesy of the Calvert Marine Museum, Solomons, Maryland.)

Mothballed ESSO tanker fleet, Patuxent River, Maryland. Group No. 2, 1930-1931, left to right: *A. C. Bedford, E. J. Sadler, H. H. Rogers, James McGee, Charles Pratt, Walter Jennings, Wm. G. Warden, Beacon, Beaconlight,* and *F. Q. Barstow.* (Courtesy of the Calvert Marine Museum, Solomons, Maryland.)

The locale provided little in the way of recreation. Other than "bars and a few seafood houses" in Solomons, fleet employees could find diversion in "movies, slot machines, card games [and] illegal drinking." However, there was "good, daily bus service to Baltimore," and many employees brought their private automobiles, which permitted travel to Washington and Baltimore in search of amusement.[31]

While shipboard maintenance operations pose a number of occupational hazards, former workers reported no knowledge of work-related deaths or serious injuries. ESSO kept a company doctor aboard the "mother ship," and engaged Page C. Jett, a local physician, as medical consultant.[32]

Two natural events came closest to being classifiable as "noteable disasters" for the laid-up fleet. A hurricane lashed the Chesapeake Bay region on 22-24 August 1933. This "August storm" caused extensive damage to numerous vessels and marine facilities in the bay and its tributaries. Within the ESSO fleet, men were rousted from bed during the storm to secure tankers with additional cabling, and labored for many hours into the night. Despite their hard work, some ships broke loose and drifted without steam, or food for the skeleton crews, until retrieved. In January-February 1934, an exceptionally cold winter froze the tankers in for several weeks. Indeed, all water traffic was stopped. As Captain Larson observed, "The severe hurricane of 1933 and the solid freeze-up of the harbor the winter of 1934 proved that the fleet was well secured."[33]

One unusual aspect of the Millstone Landing site was its use as a training base for ESSO lifeboat racing crews. In 1927, Capt. John F. Milliken convinced the

International lifeboat racing team from ESSO tanker *C. W. Teagle* at Solomons outer harbor, 1935. (Courtesy of the Calvert Marine Museum, Solomons, Maryland.)

Neptune Association to sponsor a lifeboat race to promote international good will. The competition became an annual event and was held each Labor Day in New York Harbor. It involved rowing 2.5-ton lifeboats over a two-mile course from the Narrows to 73d Street. Norwegian crews won every year between 1927 and 1932, except for a British victory in 1928 (no race was held in 1930).

In 1933, Hague offered an impressive silver cup, the R. L. Hague International Lifeboat Racing Trophy, as an additional prize in the competition. This was also the first year that an American crew—from the ESSO fleet—won. This crew lost "the boss' cup" to the Italians of the *Conte di Savoia* in 1934, won again in 1935, but lost to the *Savoia* in 1936 and 1937. The Italians' third victory retired the Hague cup. There was no race in 1938, and the *Teagle* team won the last prewar event on Labor Day 1939. ESSO entered crews in postwar competition, but none of these trained in the Patuxent.

Although assigned to the *W. C. Teagle*, which was not laid up in the Patuxent, the ESSO team was actually housed on the "mother ship" *Ethyl*. Capt. Adolv Larson was sent to the site in early June 1933 specifically to train the racing crew. One of the original team recalled the selection and training process:

Forty men were picked and were slowly weeded down to eight regular oarsmen, four substitutes and a trainer. On the "Ethyl" we had a chef to cook the food, which was hand-

1985; Smith, Thomas, Larson, and Dingle to author; Taylor interview. See also *Marine Regulations*, 60, for duties of a pumpman. In 1940, according to Dingle, each ship was manned by four mates (watchmen) and three engineers. The "mother ship" retained an engine room complement of four engineers and three firemen to keep up steam.

31. Smith, Thomas, Larson, and Dingle to author; Taylor interview.

32. Smith and Jett to author.

33. Thomas and Larson to author; Taylor interview; Robert H. Burgess and H. Graham Wood, *Steamboats Out of Baltimore* (Cambridge, Md., 1968), 131, 138, 156; Alexander Crosby Brown, *Steam Packets in the Chesapeake: A History of the Old Bay Line Since 1840* (Cambridge, Md., 1961), 94, 97; Frederick Tilp, *This Was Potomac River* (Alexandria, Va., 1978), 129. Beitzell, 146-47, reports that the sixty-ton pungy *Francis J. Ruth* was "pounded to pieces during an easterly storm" while "loading cargo at Millstone Landing . . . in 1933," but does not specifically link the sinking to the "August storm" of that year. Brown (97-101) provides a graphic description of the violence of the storm in relating the voyage of the Bay packet *State of Maryland*.

picked for athletes in very strict training. Of course we had a galley, comfortable bunks, showers, a sun deck for relaxing. The rules were strict, no wine, women or song. We trained all summer on the river and in the creeks around Solomons. We came ashore and ran up and down the roads for exercise. Just before Labor Day we went to New York for the race. During the summers of 1933, 1934, and 1935 we went through the same routine. . . .

In 1937, Mr. Richard Carroll was the trainer and he was killed by a bolt of lightning while the crew was off Sandy Point. . . . [Carroll was split in half by the strike, and two crewmen seated near him were badly burned.][34]

The presence of the tankers stirred mixed reactions among the "locals." As one former employee reported, "Some resented it. Most were glad of the cash money being spent by the men of the ESSO Fleet in a place where there was practically no employment." Another observed, "There were practically no single girls left in Solomons. All [were] married to ESSO men." One seasoned ESSO officer paid the "locals" a high compliment. He found them "friendly and cooperative . . . excellent workers—very savvy marine men."[35]

At least one complaint was lodged through official channels. This came from Cary T. Grayson, chairman of the American National Red Cross, in a 2 November 1937 letter to Gen. Julian L. Schley, chief of the Army Corps of Engineers.[36] Grayson complained that

the Standard Oil Company have a bad habit of anchoring a varied number of tank ships in the Pawtuxent [*sic*] River just south of Soloman's [*sic*] Island. . . . The presence of these ships in these waters is a very definite menace to the fishing and oystering. Is it possible to prohibit the semi-permanent mooring of this type of craft in these waters?

Schley's office forwarded the inquiry to the U.S. Engineer Office in Washington, D.C. on 8 November "for report." The commander of that unit ordered an investigation and reported back on the 17th. His report is illuminating and worth citation in detail.

1. The Standard Shipping Company of New York . . . has anchored, since about 1930, certain of their laid-up fleet of tankers in Drum Point Harbor, at the mouth of the Patuxent River. The number of vessels in the area has varied but the maximum noted has been twenty-three and they are anchored in compact groups. The area used is along the right bank of the river channel, opposite Solomons Island, where the minimum channel width is one half mile. The depth of water in the area is 40 to 70 feet. . . .
2. There have not been any complaints received in the interval since 1930 that the vessels obstructed or interferred [*sic*] with navigation or had any adverse effect on fishing or the oyster industry. It is not believed that the anchored vessels can have any effect on oystering since dredging is not permitted by law in the Patuxent River and the depth of water is too great for hand tonging of oysters. Any interferrence [*sic*] with fishing is not understood as only a small area is occupied by the laid-up fleet. It is known that stringent regulations govern the vessels while anchored in the area, prohibiting the discharge of any oil, debris, etc. overboard.
3. In view of the fact that there is no evidence of any interference with navigation it is not apparent to this office that there is any basis for considering regulations to restrict the use of the area for anchoring of vessels.

General Schley relayed the essence of this report to the complainant on 29 November, apparently closing the issue.

The lay-up site's declining days are not well documented. An official company history of the fleet's participation in World War II states that nine tankers were stationed there at various times in 1939, but most apparently had departed by the end of October. The next use of the site came "after the fall of France [May 1940] changed the tanker situation, . . . more than 20 ships [were] tied up in the Patuxent River during the summer and fall of 1940. . . ." The latest departure date given is June 1941, for *Paul H. Harwood,* which had been idled since 1 August 1940. Prior to that, the last ships to leave lay-up were *Elisha Walker* and *Dean Emery,* both in early November 1940.[37]

34. *Lamp* 16 (October 1933), 6; 17 (October 1934), 24; 18 (October-December 1935), 22-23; 19 (October 1936), 20-21; 20 (October 1937), 12; and 22 (October 1939), 13. The quote is from Clyde C. Taylor in "World Champions Trained in Solomons," *Bugeye Times* 6 (Spring 1981), 1-2, and interview with the author. As Captain Conaghan enviously observed, the lifeboat crews "ate better than the rest of us peons. But who needs steaks, eggs, roast beef, pie and ice cream every day?"

35. Smith, Thomas, and Larson to author.

36. Grayson to Schley, 2 November 1937; Maj. W. D. Luplow, Dist. Engr., Washington, DC, to Chief of Engrs. through Div. Engr., South Atlantic Div., 17 November 1937; and Schley to Grayson, 29 November 1937 in Record Group 77, Office of Chief of Engineers, Civil Works, 1923-1942, Rivers and Harbors Files, Patuxent River-Paw Paw River, Box 1361, File 7175, National Archives and Records Admin., Washington National Records Center, Suitland, Md. This record group contained no other correspondence regarding the laid-up ESSO fleet.

37. Standard Oil Company (New Jersey), *Ships of the ESSO Fleet in World War II* (n.p., 1946). The quote is from page 47. See also 27, 51, 54, 75, 76, 81, 83, 99, 144, 149, 154, 175, 187, 219, 231, 250, 253, 277, 278, 326, 377, 421, 428-29, 461, 468, and 500. Other tankers specifically cited as tied up in the summer and fall of 1940 were: *E. G. Seubert, William G. Warden, Thomas H. Wheeler, W. H. Libby, S. B. Hunt, H. H. Rogers, C. A. Canfield, R. G. Stewart, Charles Pratt, H. M. Flagler, T. J. Williams, W. L. Steed, Edward L. Doheny,* and *E. M. Clark.*

*Merle T. Cole is a research associate with the Calvert Marine Museum, Solomons, Maryland, where he has authored a number of monographs on the naval and maritime history of the Solomons area. He has also published in such journals as* West Virginia History *and* Maryland Historical Magazine, *as well as numerous county historical society media. Mr. Cole is a member of the Company of Military Historians. He serves as public affairs officer for the 2d (Chesapeake) Brigade of the Maryland State Guard, with rank of first lieutenant. In civilian life, he is a personnel specialist with the USDA Agricultural Research Service, in Beltsville, Maryland.*

# Book Reviews

E. James Ferguson, et. al., eds. *The Papers of Robert Morris, 1781-1784*, 6 vols. (University of Pittsburg Press, 1973-1984).

These magnificently edited papers of Robert Morris, the first six of a projected twelve volumes, cover the years when Morris was most influential in government and with the Congress. They show in detail his significant contributions to the American war effort, and reveal the boundless energy and resourcefulness of the man often credited with financing the American Revolution with his own fortune.

The editing is some of the best this reviewer has seen. The editors are careful to explain in the first volume their procedures with regard to punctuation, spelling, dates, indecipherable passages, and much else. If several manuscripts contain a document, they are careful to publish the most authoritative one and to list the others in the note identifying sources. They tell the reader where the originals published in the volumes may be found. Their footnoting is, as one might expect, thorough: the editors identify all people, places, and events of any significance mentioned in the text. They also put the reader into the mind and concerns of Morris by printing his daily diary entries along with the most significant letters he sent out on any given day, and the most significant letters sent to him dated the same day. What they do not do, and one can hardly fault them for that, is to print the letters to Morris not on the day their authors sent them, but on the day Morris received them. In any event, the result is thorough coverage of the work and life of the superintendent of finance and agent of marine during the critical years of 1781 to 1784. Indeed, it is the most thorough account of the life and work of an individual during a given period of time that this reviewer has ever seen, an almost daily rendering of his activities from the sources. Since it requires six volumes to cover less than one year, from February of 1781 through 31 October 1782, and since each volume is some 400 to over 700 pages long, the documentation is overwhelming. Indeed, to this reviewer that is perhaps its one fault. Granted Morris' importance, one loses sight to a certain extent of his overall achievements by looking at what he did nearly every single day during those three years. Certain events between 1781 and 1782, such as the surrender of Cornwallis, were far more important than others, such as Morris' acknowledging on 21 May 1781, that he had received two letters from Charles Lee, the only document the editors print for that date. To most historians, however, too much detail is vastly preferable to too little documentation.

Given the nature of the papers, one cannot possibly put into one short review all the contributions of Morris to the American war effort. As superintendent of finance Morris figured importantly in the Yorktown campaign through his efforts to supply and pay the Continental army. He initiated the Bank of North America; borrowed money from and repaid money to the French; planned a mint and decimal coinage; proposed new federal taxes to Congress; and much, much more. One cannot see so much coming from his work as agent of marine, even though with his appointment to that position he took over work formerly carried out by the Board of Admiralty, regional naval boards, and other civil officers of the Marine Department. In effect he ran naval affairs from the time of his appointment in September of 1781. He tried to straighten the accounts of the Marine Department and reorganize it. He had to try to assuage the feelings of the navy board of the eastern department, whose members resented giving up their authority to Morris, with some acrimonious exchanges taking place between Washington and Boston. One concludes, however, after looking over several of the papers concerned with the department, that Morris occupied himself chiefly with its finances.

Of course Morris' work entailed much more than described above, but one cannot begin to cover it all, since these volumes contain so much detail. One can only recommend this edition of the Morris papers as an excellent piece of work and an important contribution to our understanding of the American Revolution.

Franklin Wickwire

Amherst, Massachusetts

FREDERICK E. EMMONS, *American Passenger Ships: The Ocean Lines and Liners, 1873-1983* (University of Delaware Press, Newark, 1985). Illustrated, 184 pages. $38.50.

This is an unusual reference volume and one that serves to fill a gap in modern maritime history. The author provides the attractive silhouette drawings of many of the vessels discussed and certainly at least one of the latter if she were one of a number of boats used by the company in a particular service. He has divided up the world into six principal geographical sections and under each listed all of the passenger ships that operated in that zone. (The author has sensibly defined "passenger ship" as one that carried at least fifty persons, to obviate the problem of trying to determine in some instances whether vessels were freighters with passenger accommodation or were passenger boats in the fullest sense.) Each company is named, a brief narrative of its services is provided, the name of each vessel and then certain information such as year completed, years of service, tonnage, passengers—number and classes, etc.—war service and ultimate fate. It is interesting to note that vessels seemed to be transferred from one company to another with astonishing frequency and renamed. For example, take Panama Railroad Steamship Line vessel, *General W. C. Gorgas*—she started as the *Prinz Sigismund* (Hamburg Amerika Line), became a U.S. army transport vessel in 1917 after being interned in Cuba in 1914, transferred to U.S. Navy, then assigned to Panama Railroad Steamship Line, sold to Libby, McNeil & Libby for Alaska cannery service, reassumed by the U.S. Army in 1941 and transferred to the U.S.S.R. in 1945 and renamed the *Mikhail Lomonosov*. This saga is not at all unusual. The information provided is unusual and never dull. It illustrates that maritime commerce and the entire shipping world was as subject to "take-overs," financial crises, bankruptcies and re-assignment during war in all parts of the globe.

The book is one to be recommended to libraries for research purposes and for the maritime historical enthusiast. The short essays accompanying the descriptions of the various shipping companies are all well done and frequently amusing and engaging. They provide an insight, too, into the complicated world of the shipowners and their companies. It is sad to think that in general this community of corporations are really no more or at best only pale shadows of their former selves. It is equally significant to be able to have at hand lists of companies—some of whose existence was ephemeral—for students of economic history. A major study of maritime economic history has yet to be written—this book provides an excellent initial source for any scholar.

S. W. JACKMAN

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DAVID WESTWOOD, *Anatomy of the Ship: The Type VII U-Boat* (Annapolis, Maryland: Naval Institute Press, 1985). 9½" x 10", cloth, 96 pages, 24 black-and-white photographs, 200 line drawings, bibliography. $21.95.

The "Anatomy of the Ship" series originated with the Conway Maritime Press in Britain, the Naval Institute Press being the American co-publisher. The concept is an ambitious one: to describe a particular warship in the greatest detail possible, through text, photographs, and specially executed drawings—all in about a hundred pages. The first volume, with HMS *Hood* as its subject and John Roberts as author-artist, drew rave reviews from most observers including this one. The second, dealing with the USS *Intrepid*, was slightly less successful; that *Essex*-class carrier had such a long career, and underwent so many drastic modifications, that she could not be given the coverage the short-lived *Hood* received. This third volume deviates from the original course in assaying an entire class of vessels. The results, while impressive in their own right, suggest that the first idea was better.

The Type VII U-boats were among the most important, successful, and numerous warship classes ever built, and have not been ignored by historians. Mr. Westwood's bibliography quite properly acknowledges several recent works on the subject, notably Eberhard Rossler's staggering *The German U-Boat*. The reader must ask how much a book of ninety-six pages can add to the literature.

Mr. Westwood has made a valiant, knowledgeable, and skillful effort to force his subject into a format that can almost, but not quite, hold it. His brief text does a

good job of summarizing the strategic and technological aspects of the U-boat campaign, and sorts out the labyrinth of type designations. The twenty-four photographs are well printed, unusual, and interesting, though they cannot claim to treat the subject comprehensively.

The drawings, as in the other volumes, form the centerpiece. Mr. Westwood is a fine draftsman, and he has done prodigious research—both in primary sources and on board U-995, which is preserved as a memorial outside Kiel. It is difficult to imagine how, within the conceptual framework imposed upon them, these drawings could be bettered. But a submarine is a complicated piece of hardware, and fiendishly difficult to represent in two dimensions. When that problem is added to the fact that 704 Type VII U-boats were built (no two of them identical, we may presume), the task Mr. Westwood set for himself looks beyond achievement. His drawings will repay meticulous study, but inevitably will leave the reader with numerous questions as to precisely how the infernal machines worked. Nor can the book be regarded as a description of a particular boat. Those seeking specific details will find such vague observations as one about wood decks gradually replacing metal ones more frustrating than helpful.

The editors of the series might do well to re-think certain stylistic decisions. They seem to have determined that the drawings must be accompanied by only the briefest explanatory keys. In the case of a mechanical apparatus like a U-boat this is a mistake; to identify a small, oblong shape as a "housing for FuMB 26" or a "Kirek torpedo firing lever" is scarcely edifying. The blank spaces around the drawings would have accommodated a short verbal explanation of how the various systems functioned.

If the publisher is serious about aiming this series at the model builder, some more thought needs to be given to that reader's peculiar requirements. The ship modeler wants a set of hull lines, broken into three views, with station lines, buttock lines, and waterlines to establish how they relate to each other. (The one body plan Mr. Westwood includes bears numbers indicating the distances from the cross sections to the aft perpendicular—but none of the six elevations shows where the aft perpendicular is. That cannot be taken for granted.) It also would be helpful to have at least one view of the boat's port side, which undoubtedly differed at least slightly from the starboard. The modeler's biggest quibble with the series undoubtedly will be the lack of information about color schemes. This volume addresses that subject only with a group of individual and flotilla markings on the dust jacket.

Mr. Westwood has come closer to achieving an unattainable goal than this reader thought possible. Unfortunately, though, the book would have had to be at least three times as long to do its subject justice. It is to be hoped that, in the future, both the author and the editors of this outstanding series will choose subjects better suited to the format.

JOHN A. TILLEY

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BRIAN TOSS, *The Rigger's Apprentice* (Camden, Maine: International Marine Publishing Company, 1984). 8½" x 11", cloth, 195 pages, 243 illustrations, 13 tables, table of contents, foreword, preface, acknowledgments, appendix, glossary, bibliography, and index, $27.50.

Brian Toss has proved himself as a rigger and is a competent writer and teacher of what he has learned. In this book he has dared to elucidate a subject that has been covered in various degrees by others since sailors learned to write. However, here he has done something new: he has combined the many usually separated facets of rigging in a single tome that explains the total procedure, including design, fabrication, and installation. This broad scope and the evident intent to avoid a boringly lengthy treatise has resulted in a more abbreviated coverage of some sub-systems than a serious student would like. However, he has done an excellent job of describing the use of materials available to the modern rigger and not heretofore covered so comprehensively by others. *The Rigger's Apprentice* is directed at the handy amateur and specifically covers the rigging of cruising sail boats of up to about forty feet in length. The book is organized in nine chapters the titles of which, in association with the index, provide ready reference to the contents. The titles alone are not clearly definitive.

Chapter 1, "Rigging 101," deals with the fundamentals of handling rope. The illustration of a "lefty" mak-

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ing an alternate hitch coil while facing the viewer will puzzle right handers not familiar with this method. Several more methods of making stowage coils would have been helpful to those amateur sailors anxious to keep a "Bristol fashion" ship. Under the subject of "small stuff," a suggestion on where to obtain real tarred marline would have been appreciated. In chapter 2, "Tension," author and illustrator both do a commendable job of describing the use of tackles and other tensioning devices.

Chapter 3, entitled "Friction," deals mainly with the aspect of friction within the structure of knots. The novice would welcome more discussion of applications. Here some of the illustrations appear very clear at first glance but quickly puzzle the reader because of the position from which viewed, and failure to define rope endings. The bowline on a bight and flying bowline fall into this category. Some very good but not commonly known knots are well described and illustrated, such as the zepplin bend and Toss's own straight bend. While the author disparages the use of the "butane backsplice" on synthetic rope, this method is quite efficient if refined by using a propane torch and rolling the end of the rope under a knife blade.

Chapter 4, "Design and Materials," presents simplified treatment of subjects that could fill a number of books by themselves. While the described method of estimating stresses is empirical, it gives logical results in the case of the vessel types described. For a more complete understanding of the principles the inexperienced reader is advised to consult Brian's own reference or an experienced yacht designer. The tables of data and other information on rigging materials are current and very helpful.

"Loft Procedures," chapter 5, contains much useful information including mathematical methods for calculating lengths of stays that would startle an old-time rigger. The well-known method of making side stays while the mast lies on trestles, with a temporary frame representing the deck and chain-plates, is not described. Although details of some old-time rigging are given, the various types of ratlines and the full procedure for rigging and setting up deadeyes are not covered. The eye-splicing of wire rope is well described, along with serving as applied to modern craft.

Chapter 6 on "Installation and Maintenance" describes the placement and rigging of a modern, as well as an old-style mast with topmast. Rigging of the topmast is described in much verbal detail but the joining of lower and topmasts is not illustrated and would be difficult for an amateur to understand. There is much useful information on setting up, tuning, and caring for a rig.

"Emergency Procedures" is the title of chapter 7. It describes a number of schemes that a sailor would be wise to remember. The "Molly Hogan" wire rope eye-splice is a good example. Chapter 8, entitled "Fancy Work," covers sufficient decorative work to turn an amateur into something of an expert. The "monkey's fist" is missing, but then there is little call for it as a heaving line knot on craft of the size under consideration. Chapter 9 presents a number of "Tricks and Puzzles" to hone one's dexterity. An appendix contains useful tables of characteristics of wire and soft rope. A good glossary, bibliography, and index are also included.

The book is attractively illustrated, but it appears that the artist is not himself a rigger. Some of the illustrations of line-handling and knot-tying are not drawn as viewed by the performer and are not readily interpreted. Toss is generous with his credits to other individuals and organizations whose work has aided him, particularly Clifford Ashley in regard to rope work.

*The Rigger's Apprentice* is a worthy addition to the library of any all-round boatman who wishes to keep abreast of present practice. Experts may disagree with some of Brian Toss's methods, but that is a condition of life. An expanded and amplified edition might be welcomed in a few years.

EDWARD G. BROWNLEE

Cherry Hill, New Jersey

FRED M. WALKER, *Song of the Clyde* (Cambridge, 1984). 7¾" x 9¼", hardback, 233 pages, bibliography, appendices, index, illustrations. £16.95.

This most interesting and well-produced book gives what is almost certainly the most detailed history to date of shipbuilding on the River Clyde. Introductory chapters on the River Clyde itself, on early wooden shipbuilding, marine engine building and shipbuilding in iron (especially along the Clyde) are followed by chapters on the principal shipbuilding districts: Green-

ock and Port Glasgow, Paisley and Renfrew, Dumbarton, Clydebank, Broomielaw to Bowling, Govan and Linthouse, Firth of Clyde (including the Ayrshire coast and Campbelltown), and Kirkintilloch. Each chapter contains a rather detailed history of the principal shipyards of the district, together with the often complicated relationships amongst them, and a listing of the more important vessels they constructed. These chapters form the backbone of the book, but the latter is made more readable and interesting by their being dispersed among chapters on test tanks, on the influence of Glasgow University and learned societies on shipbuilding, and on classification societies; on ship design and the shipbuilding process; on the steam turbine; on small powered craft; on naval construction on the Clyde; and on diesel machinery. These latter chapters are apparently written for the general reader and do not contain much material unfamiliar to technical readers or to marine historians whose fields include British deep-sea shipping. The section on Lloyd's Register and other classification societies emphasizes the British Corporation (1890-1954) (which is natural since it was based in Glasgow) but the treatment would have been better balanced by some mention of the Liverpool-based Underwriters' Registry for Iron Vessels (1862-1885). Chapter 19, "From Boatyard to Nationalization," gives a clear, if depressing, picture of Clydeside shipbuilding in recent years, the first systematic treatment of this subject that the reviewer has seen; and chapter 22, the final chapter, indicates the type of work now being produced or likely to be produced there.

Appendices include an extensive bibliography, arranged by chapters; statistical diagrams of the maximum number of shipbuilding and shiprepairing establishments in the Clyde area during each five-year period from 1815; and of the number and the tonnages of ships over 100 tons gross launched in the world, in the United Kingdom and on the Clyde (tonnages only) for the period 1892-1982. The outstanding appendix is Number Three, a very comprehensive list of shipyards and ship repairing establishments of the River Clyde and the surrounding area: 392 establishments are listed, together with dates of operation, location, approximate number of ships built (when known), and brief remarks. This is almost certainly by far the most comprehensive list to date on this subject and for the marine historian is the most important topic in the book. A fourth appendix illustrates (in black and white) flags of some twenty-five companies with shipbuilding interests on the Clyde. What would have been very desirable (and very difficult) is a list of ships (say over 500 tons gross) built by each yard and of engines built by the various engine builders. This information for ships built in Britain before 1850 is usually to be found in Lieutenant Brown's manuscript notebook (formerly at the office of the Registrar General of Shipping and Seamen and now at the Public Record Office), and for ships in existence after about 1872 the information (for metal vessels) is to be found in the Underwriters' Registry for Iron Vessels and for all vessels from 1886 on in Lloyd's Universal Register (combined in 1890 with Lloyd's Register). But for ships built between 1850 and 1872 the information is in general difficult to find. There is some indication that it is given in returns made to the Board of Trade, but the reviewer has not located them, if they still exist.

Illustrations are numerous and excellent and include a most unusual photograph of the Cunard *Persia* (1856) under construction.

Errors or misstatements are few and relatively minor, but the following should perhaps be noted: 1) The ships taken over (p. 108) by Canadian Pacific from Elder, Dempster's Beaver Line in 1903 did not have names with the prefix "Beaver" nor were they so renamed. Canadian Pacific used the prefix for some (but by no means all) of their freighters in later years. 2) Indicated horsepower is properly applicable to reciprocating steam engines, with shaft horsepower used for turbines and brake horsepower for internal combustion engines, a situation which the author does not make entirely clear. 3) As of 1902 the Anchor Line (p. 162) could hardly be said to have had a tradition of multiple funnels. *Furnessia* (1881) originally had two funnels, *Astoria* (1884) had two, and *City of Rome* (1881) three, but the first two were not built for the Anchor Line, and the third, though operated by the Anchor Line, was never owned by them. Most of their transatlantic express steamers for the quarter of a century following *Columbia* had multiple funnels, but the majority of the Anchor Line's great fleet had single funnels. These are relatively small points, and altogether the book can be recommended as an excellent treatment of shipbuilding on the Clyde.

As the author concludes, there is still a future for shipbuilding there, but one is reminded by the statement of Heraclitus, *πάντα ῥεῖ ποταμοῦ δίκην* (all things flow like a river), that not only does the Clyde

flow into the sea, but the great days of shipbuilding on its banks have been carried away by the flood of time.

E. K. HAVILAND

Baltimore, Maryland

NORMAN BOYD, *The Discovery of Ship Models*, second edition (Colchester, England: Napier Editions, 1983). 8½" x 6¼", cloth, 153 pages, black-and-white photographs, bibliography. £8.95.

The ship model occupies a unique position in the world of maritime artifacts. It can be a primary source, an educational exhibit device, the end product of a research project, a source of relaxation, or, in the purest sense of the term, a work of art. The compendious literature on the subject has to make one wonder how much a book of such modest dimensions as this one can add to it.

Mr. Boyd, to his credit, has tried to fill a specific, and interesting, niche. His targeted audience is not the model builder but, apparently, the collector. That such a work should appear at this time is not surprising, for a modest boom in ship model brokerages seems to be in progress. Perhaps there is indeed a market for a book that would enable its readers to establish what the author calls a "connoisseurship" of ship models.

Unfortunately, however, Mr. Boyd's knowledge does not quite match his considerable enthusiasm. His bibliography suggests that his reading has been oddly selective, and the text confirms that his expertise is spotty at best. Some chapters are reasonably reliable; the section on Napoleonic prisoner-of-war models, for example, is virtually a paraphrase of Ewart Freeston's fine book on the subject. Others are a jumble of historical inaccuracy, misused terminology, and myths. The old—and unsupportable—story of how dockyard models showed the stupid Admiralty Board how a ship was built is trotted out again, for example, with no mention of the fact that the hull structure of most such models is symbolic rather than literally accurate. And the assertion that there are no Greek ship models will come as a shock to our book review editor, who recently published a book about them.

One unusual feature of the book is a series of biographical sketches of currently active ship modelers. The supporting photographs establish that the six gentlemen in question are indeed experts in the field, but it should be emphasized that their inclusion is due to the fact that Mr. Boyd happens to be acquainted with them. For any of the numerous equally talented practitioners to lose business due to his absence from this book would be an injustice.

The photographs do a reasonable job of covering the gamut of the ship model field, from Egyptian tomb relics to plastic kits, but the captions are as erratic as the text. That the last page of the book should apply the word "frigate" to a model of HMS *Queen Charlotte*, complete with all three of her gundecks, somehow seems appropriate.

The recent surge in the popularity of ship modeling has produced an accompanying mass of books and periodicals, ranging in quality from the outstanding to the execrable. (Model building, thank heaven, does not have an accrediting agency.) This volume is not one of the better examples. It may be of some interest to the beginning collector or the casual antiquarian, but the aspiring enthusiast should regard it as a seriously flawed introduction to the subject rather than a reliable treatise.

JOHN A. TILLEY

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MIFFLIN THOMAS, *Schooner from Windward* (Santa Barbara, California: Seacoast Press, Honolulu, Hawaii: University of Hawaii Press, 1983). 8¼" x 9¼", iv + 239 pages, cloth, illustrations, appendix, biliography, notes, index. $21.95.

This is an excellent, thorough and well-illustrated account of a most interesting subject.

Coastal and inter-island travel in Hawaii before the first arrival of foreigners in the late eighteenth century was mostly for pleasure or for war and by canoes, either single-hull with outrigger, or by catamarans. Propulsion was primarily by paddling. Beginning about 1790 canoes were gradually superseded by sailing vessels of Western type—sloops, schooners and brigs. King Kamehameha I, having by 1809 secured political control

of the islands, turned his attention to trading, and he and his chiefs built up a flourishing trade with China in sandalwood, the profits from which were frequently invested in ships, a number of which are mentioned. In particular, Liholiho (Kamehameha II) acquired the yacht *Cleopatra's Barge*, built in 1816 for George Crowninshield, Jr., of Salem. Whaling followed sandalwood as an activity that promoted prosperity in Hawaii, especially from 1820 into the 1870s, reaching its peak about 1845, at which time almost six hundred arrivals of whaling vessels were recorded annually. At the same time Hawaii was producing sugar, coffee, wheat, livestock and other commodities, which gave rise to a substantial inter-island trade, at first by overseas vessels, but from the late 1830s by smaller schooners of from 10 to 150 tons, whose shallow draft made them more adaptable to smaller harbors. Most of these craft were owned by the king and his chiefs. The increase of privately owned vessels led to the Hawaiian navigation laws of 1846, which restricted local and inter-island trade to Hawaiian registered vessels, many of which are mentioned by name. There is a section devoted to the hardships and dangers of inter-island shipping in the days of sail, and considerable information is given on individual owners.

The first inter-island steamer was *Constitution*, which arrived in January 1852, but returned to San Francisco the following month; the first steamer in regular service being *Akamai*, ex-*S. B. Wheeler*, of the Hawaiian Steam Navigation Company, which arrived in November 1853 and continued in coasting service until condemned about a year later. She was followed by other steamers, of which the most conspicuous was *Kilauea* (1859), a screw steamer operated by a second Hawaiian Steam Navigation Company, but with various actual owners. After she was laid up in November 1868 Hawaii had no inter-island steamers for two years. Much information is, however, given for the building and operation of sailing coasters in this period. In October 1870 the Hawaiian government bought and reconditioned *Kilauea*, putting her under the management of Charles H. Judd, soon succeeded by his brother-in-law, Samuel G. Wilder.

The reciprocity treaty of 1876 between Hawaii and the United States brought about a great increase in the export of both sugar and rice from Hawaii and this stimulated inter-island trade. The Hawaiian government acquired the new steamer *Like Like* in 1877 and shortly afterward Samuel Wilder purchased her and the old *Kilauea*, which marked the beginning of Wilder's Steamship Company, the first of the two companies that dominated Hawaiian inter-island steamship service for the remainder of its existence. Their principal rival was the Inter-Island Steam Navigation Company, started in 1878 by Capt. Thomas R. Foster, who already had six schooners in coasting service. *James Makee* (ex-*Iris*) (1879) was his first steamer. The numerous steamers of the two companies are well described and illustrated, *Kinau* (1882), laid down for Spreckels Brothers of San Francisco but completed for Wilder's Steamship Company, is particularly important as the most luxurious inter-island steamer of her day.

Political discord erupted in 1887 and brought about a new constitution, and in 1893 the monarchy came to an end and was succeeded by a republic. The voyage of the gunboat *Kaimiloa* (ex-*Explorer*, ex-*Firebrick*), a former merchant vessel, to Samoa in 1887 as a gesture of Hawaiian goodwill accomplished little or nothing. She returned later in the year and was sold in 1888 to the Inter-Island S.N. Co.

Samuel Wilder died on 28 July 1888 and Captain Foster on 30 August 1889, but their respective companies continued under capable management. Various additions to the fleets are mentioned, of which Wilder's *Claudine*, originally owned by the Spreckels interests, is notable as their finest vessel to date. She was, however, found to be too large to be maneuvered in Kahului and other island harbors, and Spreckels had had her shortened by thirty-five feet. Because of a depression caused by the McKinley Tariff Bill, no new steamers entered the Hawaiian coasting service for several years following 1890. The Wilson-Gorman Tariff of 1894 placed Hawaiian sugar growers on an equal footing with mainland producers and led to a sugar boom in the islands, which called for additional tonnage, and this and the need to replace several marine losses led to the addition of a number of vessels to the Hawaiian coastal fleet. Some of the later ones were of steel, but the majority, both new and second-hand, were of wood. It is also to be noted that Inter-Island had several vessels built of wood in the Pacific Northwest which were enrolled as schooners and sailed to San Francisco to receive their engines, after which they were renamed and registered as steamers before going to Hawaii. There is an account of expeditions, usually by chartered

inter-island steamers, for the purpose of claiming various islands for Hawaii.

Hawaii was formally annexed to the United States on 12 August 1898, at which time Wilder's S.S. Co. had a fleet of eight ships, four of iron or steel, while the Inter-Island S.N. Co. had ten vessels, all wooden. Their coming under United States inspection laws in 1901 led to additional expenses much resented by the shipowners. Both Wilder's S.S. Co. and Inter-Island made a poor financial showing in the early part of the new century, due in part to increased expenses, in part to marine casualties (fortunately not accompanied by loss of life), and in part to an outbreak of bubonic plague, and a merger between them was considered in 1901 but not carried out until 1 July 1905, with Inter-Island the surviving organization.

Following the merger, the older vessels were put up for sale, and a new steel passenger and cargo steamer, much larger and finer than any of their previous vessels, ordered from the Union Iron Works in 1906, although she was not delivered, under the name of *Mauna Kea,* until March 1908. In 1908 the American-Hawaiian Steamship Company entered Hawaiian coastal service with the steam schooner *Despatch,* but this competition did not last long. Most Hawaiian landings—they were hardly ports—were difficult and dangerous, but where cliffs ran along the coastline cargo handling was improved in the early 1900s by the introduction of aerial tramways. The first decades of the twentieth century also saw the last days of the inter-island schooners.

The Inter-Island S.N. Co. had serious trouble with their masters and mates in August 1912, but by May of the following year operations were back to normal, both sides having suffered from the strike. Capt. Frederick C. Miller and the Miller Salvage Company emerged as a secondary inter-island carrier, becoming the Oahu Shipping Company in 1913. The business of Inter-Island had been increasing so rapidly that the company acquired two steamers, the second-hand *Cascade,* renamed *Wailele,* and the new steel passenger and freight steamer *Kilauea,* which entered service in November 1911 and was their finest ship to date. Various salvage operations of Inter-Island, including *Manchuria, Sheridan* and *West Eldara* (misspelled as *West Eldura*) are described, also their routes, charges and expenses in the period 1913-1918 are given.

Young Brothers, who had already been operating launches, acquired larger tugs about 1914, and in later years their tug and barge business came to dominate inter-island cargo shipping. Inter-Island was given a clean bill of health by an investigation of the Hawaiian Public Utilities Commission in 1914, but its attitude toward its patrons seems to have deteriorated after that and was severely criticized in a P.U.C. investigation in 1916-1917. There were some marine losses in the period 1913-1918, but the inter-island carriers were not greatly affected by World War I and, despite restrictions and inconveniences, Inter-Island profited under wartime conditions, especially from the sale of older vessels.

Dissatisfied Hawaiian cattlemen formed the Hawaii Meat Company which in 1920 started a steamship business which was carried on very successfully until sold to Inter-Island in 1926, following which A. W. Carter of the meat company was elected a director of Inter-Island. In 1923 *Haleakala,* the first of Inter-Island's large modern passenger and cargo steamers, arrived from her builders, the Sun S.B. & D.D. Co. of Chester, Pennsylvania. Full details of this steamer are given, as well as information on Hawaii's 'mosquito fleet,' vessels serving landings which could not offer sufficient inducement for Inter-Island ships. The year 1925 saw the arrival of *Hawaiian Standard,* the efficient inter-island tanker of the Standard Oil Company of California.

Matson Navigation Company, which by 1925 had become the major carrier between the Pacific Coast and Hawaii, acquired control of the Inter-Island Steam Navigation Company in January 1926, and in due course they ordered the large passenger and cargo steamers *Waialeale,* which entered service in June 1928, and *Hualalai,* which entered service the following year, sister ships of 3,088 tons gross each, and the smaller *Humuula* (1929), 961 tons gross, primarily a freighter, but with limited passenger accommodation. In addition they purchased the 1,519-ton freighter *Griffco,* built in 1920, which was renamed *Kaala* but lost in January 1932.

Inter-Island S.N. Co. was prosperous during the 1920s and 1930s, declining freight business being compensated by increasing passenger business, about a quarter of the profits arising from activities other than ship operation. In 1929 they, in conjunction with others, established Inter-Island Airways, Ltd., which grew rapidly and in 1941 became Hawaiian Airlines, Ltd. Several weeks before the Japanese attack on Pearl Harbor, Hawaii was gradually being shifted to wartime conditions, and shortly after the attack the Inter-Island

vessels were requisitioned by the U.S. Engineers Corps, with control passing to the U.S. War Shipping Administration on 1 May 1942, Inter-Island continuing as general agents for them. The vessels were employed throughout the Southwest Pacific. Three saw action, but suffered no damage, though the Army transport *Royal T. Frank* was torpedoed and sunk with loss of life.

Late in 1943 Inter-Island purchased all shares of its stock held by Matson Navigation Company, thus ending the connection between the two companies. Following World War II passenger revenues had almost disappeared, as nearly all passengers used Hawaiian Airlines. Whereas in 1941, 82 percent of inter-island passengers traveled by ship, in the first eight months of 1947 only 3 percent went that way. Operating costs increased very greatly, direct shipments from the mainland reduced the once-profitable transshipment business, the ships were getting old, and Coast Guard regulations required expensive fire sprinkler systems on ships carrying more than twelve passengers. The last of the company's ships was returned by June 1947, but only *Hualalai* was brought up to the new federal standards. Tug and barge service proved safe and economical for moving cargo. Young Brothers extended their barge business to general service in 1947, but it was mid-1948 before Inter-Island adopted scheduled barge operation. Inter-Island discontinued service by large passenger ships when *Hualalai* was permanently withdrawn on 15 January 1949, and gave up all shipping activity as of 18 March 1950, and its activities were confined to Hawaiian Airlines, Inter-Island Resorts, and Overseas Terminal, of which one share in each was exchanged for each share of Inter-Island Steam Navigation Company.

The final chapter treats inter-island transport in the period 1950-1980. Two efforts to introduce jetfoils proved financially unsuccessful. Matson introduced inter-island container ships in 1963 and as of 1979 were operating *Mauna Kea* (ex-*Hawaiian Princess*) (1967). Aside from this, inter-island passenger service in the 1980s is confined to airlines and cargo service primarily to Young Brothers barges towed by tugs of the Dillingham Tug & Barge Co.

In spite of its title, this most excellent history emphasizes inter-island service by steamers and motorships, though service by sailing vessels is also well covered. There are some misprints, but none could cause any difficulty for the reader. The author rather consistently uses the transitive verb "lay" when the intransitive verb "lie" is called for, but this, too, does not interfere with the maritime history. The subject of shipping amongst the Hawaiian Islands is self-contained and of great interest to many maritime historians, and has never been treated extensively before, so that this thorough, complete and interesting account is most welcome and can be highly recommended to them.

An excellent appendix lists all powered vessels in inter-island service, together with tonnages, dimensions, builders of hulls and of engines, and biographical details. Tugs, barges, launches and sailing craft are not included, but information on them will be found in the author's *Hawaiian Inter-island Vessels and Hawaiian Registered Vessels* (Seacoast Press, Santa Barbara, California, 1982). A table of Hawaiian words used in the text, a bibliography, notes on the various chapters, and an extensive index complete this fine book, which deservedly received the John Lyman Book Award in North American Oceanic History.

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W. GILLIES ROSS, *Arctic Whalers, Icy Seas* (Toronto: Irwin Publishing, 1985). xvi + 263 pages, clothbound, $34.95.

The Arctic has become a contentious place, beset as it is by the spectre of technological disaster and the demographic catastrophe of too much human inhabitation. To many of us who recoil at the disruption of earth's last remaining grand natural spaces, this horror seems to have come with alarming suddenness. Not fifty years ago, we were content to know that the Eskimo people cared for the land northward of the last tree line, spearing fish and whales and tundra birds with bone and iron, and blocking out ice houses for shelter. Polar exploration was an eccentricity, one of mankind's pure quests to set claim on the final coordinates of the undiscovered planet.

Quickly then, we have encountered Armageddon. The voyage of the supertanker *Manhattan* proved the impracticality of navigating a northwest passage; yet

the assault continues on the Canadian government, for permits to ship commercial quantities of oil through the Arctic passages, and on the American, as well, for the right to erect the great pillars of the drilling platforms that come to dot this Last Place. Aerial photography aircraft and satellites crisscross the tundra for clues to hidden mineral deposits, and in the Beaufort Sea, studies are now conducted to determine the impact not of aboriginal subsistence hunting on the bowhead whale, but rather the effect of ships' propellers and drilling engines and industrial noise pollution on these benign, migratory beings. The Arctic has surrendered even the cryogenically mummified corpses of Sir John Franklin's men, as if symbolic of mankind's intrusion into the most secret surfaces of the earth.

The Inuit themselves have acquired a taste, abandoning obsolete "ways" in order to better control oil prices, distribute food, and purchase sno-gos and satellite communications networks from the south, and all the while arguing in behalf of the continuation of the historic whale hunt. From the "Lower Forty-eight" and the southern centers of urban Canada, the ice has been invaded by a host come to leach and extract, their spokesmen intransigent against a counterpoint army bent on preserving the sanctity of the fecund Arctic.

All of this happened as if last week. We hear, as we listen and read, that a technological explosion is suddenly changing the far north, and perhaps denuding it of its unique value in our own lifetimes, so that, like the felling of trees in the Amazon rain forests, the last precious "wastelands" will have yielded up all their treasures and possessions to the unstoppable growth of greed. It is the old game of monetary security against spiritual wealth; corporations of men robbing the individual man of an earth he cannot visit and so, perforce, must not need. But as of last month, or so it seems, the battle over the Arctic has become unresolvable.

Yet Arctic change has not come about all so promptly. True, the volume of change is now highly geometric and disproportionate, but the infection of commerce goes back a long way, at least in the eastern Canadian Arctic, to the arrival of the first seafaring miners, the whalemen. Few Inuit cultures, and few Eskimo traditions were so sanctified that they were not obligingly changed by the arrival of wooden ships and iron tools. The change we see now as quantifiable dispossession and redistribution began as simple searches for whales and seals in the summer polar seas. And it began a very long time ago.

It seems not for this that W. Gillies Ross has written *Arctic Whalers, Icy Seas.* His purpose, I believe, was to bring the little-understood hardships and the many discoveries of the Davis Strait whale-fishermen into clear focus. This particular whaling ground has been less studied, since it was detached from, and only indirectly related to, the more familiar fisheries of Spitsbergen and east Greenland. And Ross has done this, for the benefit of students of whaling and other historians, portraying the fishery by quoting the words of first-hand accounts, which may be taken for substantive fact, and supporting the texts with many heretofore unpublished historical photographs and illustrations. Although one may argue that annotating historical documents for publication constitutes editorship and not scholarship, and though it is true that Ross' role as an editor surpasses his scholarly function, still, if anything further is to be done by way of analyzing the impact of early whaling on the west coast of Greenland, then *Arctic Whalers, Icy Seas* is the current best starting-place.

The pyromantic Arctic evil presented on the dust jacket by Canadian artist David Blackwood sets the mood of the various authors chosen by Ross. It is the same Blackwoodian foreboding which jacketed Farley Mowat's *In the Wake of the Great Sealers.* Inside there are good endpaper maps, but a better one on page xii, which shows most of the locations mentioned in the text. The photographic selections are largely flawless: evocative deck shots of walrus butchering, their heads disjointed like wall trophies upon the deck; the "mollie boats" at work assisting the British whalemen in the flensing; a whaleman's chart of Davis Strait, the larger part of its center filled with the ominous legend: "Solid Continent of Pack and Floe Ice, Interspersed with Myriads of Icebergs." Ross relies heavily on the sturdy photographs taken by Walter Livingstone-Learmonth on the Dundee whaler *Maud* in 1889; quintessentially, Livingstone-Learmonth's photo-portrait shows him with one foot atop a giant polar bear carcass, one of hundreds of animals hunted, pestered and finally shot for play during the photographer's visit to the North Polar regions. There are photographs and drawings of Eskimo people, their houses, and the methods and tools of their hunting; and a serviceable glossary which, if nothing more, defines some words from the British whale-fishery which complement those we know so well

from the American: "krengers" (who receive the blubber sent on deck from the flensing overboard), "mollie boats" (the whaleboats tied alongside the whale during the flensing), the "boatsteerer" (who, in British whaleboats, actually "steers" and is second in command to the harpooner; in American usage, harpooner and boatsteerer are one and the same man); and finally, "spek tackles," the tackles used to hoist strips of blubber onto the deck during flensing.

The texts excerpted by Ross date from the writings of W. E. Cass, surgeon of the Hull whaleship *Brunswick* in 1824, to early-twentieth-century observations of Eskimo life by David Cardno, a Scotsman whose Arctic career included both whaling and a stint as manager of two whaling and trading stations. In between are surgeons and sailors. The ubiquitous ice and its dangers bind them together, and the whales give them purpose. Weather is paramount; gales, icebergs, and building pack ice that daily threaten, and sometimes bring death as accompaniment. And since many of the writers selected by Ross are erudite and educated, including several medical students, it goes without saying that death—particularly the death of those strange Arctic shapes, the Eskimo—receive the same clinical treatment as the harpooning of whales, the passage of weather, and the still grandeur of the Arctic horizon:

> They had been buried with their clothes on as one of them had a sealskin cap on his head. Their crania presented some very distinguishing marks, especially their great breadth across the cheek bones. . . . I wished very much to have kept one of their crania but the boat's crew would not hear of it [the unidentified surgeon of the *Hercules*, in the ice in 1831; p. 36].

Ross' chosen narratives cover a wide span of time, and the difference of chronology is pertinent. At the beginning, it is clear that the shipmasters, sailors, and owners alike are venturing into new waters. With the diminution of the more familiar baleen-whale fishery off the eastern shore of Greenland, it had become necessary and desirable to pursue the bowhead whale between Greenland and the vast island groups which today constitute the north of Canada. Having little knowledge of the area, the shipowners sent unprepared ships and unprepared men, and only by luck did the majority of them survive a frozen ice ocean to return home to write their adventures. Subsequent voyages proved little better equipped, as a counting-house greed devalued the worth of individual lives.

*Arctic Whalers, Icy Seas* is at first an examination and clarification of the specific whale-fishery of Davis Strait and Cumberland Sound. On a larger scale, however, W. Gillies Ross' new work is about the infiltration and dissemination of "western" culture in the Arctic, and about the precipitous destruction of the natural scape through the uncaring and necessarily hardened hands of the arriving whalemen. The scenes that stick are the ones which portray their calamitous indifference; massive slaughter of migratory birds as a source of entertainment, and the interminable and repetitive killing of walrus and polar bears and their young as a rite of passage to be experienced time and time again by the shooter. Alcohol traded to Inuit villagers, specified and unspecified carousing, and always killing beyond the needs of the commercial hunt: man's indifference to a place in time may be the real focus of this book. For these sailing-ship whalemen, the Arctic was exploitable *wasteland,* nothingness, misery frozen in the ice, fingers and toes frostbitten in ice-shrouded bunks, ships wrecked, with only the impotent sport of shooting the incautious walrus and bear for a pastime before, God's wisdom willing, a hero's welcome home.

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LEWIS R. FISCHER and GERALD E. PANTING, editors, *Change and Adaptation in Maritime History: The North Atlantic Fleets in the Nineteenth Century* (Maritime History Group, Memorial University of Newfoundland, 1985). 198 pages, editor's note, list of 1982 conference participants, preface.

This volume is dedicated to the memory of Keith Matthews, co-founder (in 1971) and longtime chairman of the Maritime History Group which created an archive and a research unit with the Department of History at Memorial University of Newfoundland. Since 1979 this group has published the proceedings of meetings held under the auspices of the Atlantic Canada Shipping Project, of which this is the sixth and concluding one.

Though this volume is focused on Atlantic Canada, the eastern shores of the ocean are not neglected. Two

papers from London and one each from Bergen and Hamburg discuss the impact of European conditions with sufficient range to keep the larger picture of the North Atlantic fleets clearly in mind. The theoretical apparatus is informed by current theory, and presentation benefits from tables and graphs.

The major theme treated is the shift from wood to iron ships and from wind to steam power. Here as elsewhere, the lesson is that generalizations are usually inapplicable to any one specific situation. Except for the grossest summary statement, that indeed the nineteenth century saw those shifts, the details of where and when are sometimes diametrically opposed. Commonly held ideas about the appearance of steam, for instance, need correction. One significant fact was the coexistence of steam and sail on the Atlantic, leading to the Norwegian discovery in 1914 that sailing vessels and steamers operating in conjunction could be profitable.

Ownership and operation shaped the traffic as much as they were constituents of it. The American partnership or single-ship company is seen to have given way in the 1880s to the joint stock company with a managing director. Americans and Canadians fell behind continental powers in shipping and shipbuilding because they failed to achieve economies of scale through reorganization of the industry.

The story of who invested and who owned the ships is a different one for each region. Particularly interesting is the contrast seen in the context of developments in the hinterland of the ports. In America and Canada demand for investing overseas trade, in railroads and canals to the mining and agricultural frontiers, competed with opportunities for investment in overland markets to the west. In the second half of the century, a boom in overseas trade brought a 50 percent drop in marine freight rates. This led to a specialization of international shipping such as the development of tramp and liner traffic, calling for drastic restructuring of the trade, which was not undertaken by Canadians or Americans. Other important issues which determined developments were the assessment of profit from tramp versus liner-traffic, of staples versus a diversity of cargo.

The evolution of marine technologies has an equally diverse history with Britain in the lead. The major influence of the Atlantic cable on shipping is easy to deduce. London became the hub of the world shipping industry which had to rely heavily on certain and prompt worldwide information. This left America behind despite the rapid growth of American exports.

The make-up of the ships' crews also deserves mention. Here the depiction of a more or less international labor pool corrects older studies which concentrated too intensively on local conditions, such as the availability of surplus hands from the fishing industry. The higher ranks of the merchant marine were drawn from an international pool with men moving about easily from one flag to another. The state of technology was more important in the allocation of trained manpower to serve it than was national origin.

One aspect to consider for its role in shipping is the narrow one of technical innovation versus established expertise and conservatism in all phases of navigation from lighthouses to notes to mariners issued by the navies. Although this topic is not specifically treated, the role of government is shown to have been minor. Government subsidies, for instance, were not important to the development of marine technology in Britain. The repeal of the Navigation Acts in 1849 benefitted the Scandinavians while not being crucial as formerly presumed for the British merchant marine. In America, shipbuilders profited from government support more than owners, and the German government is shown tc have helped oceanic shipping by official propaganda.

The merit of the book under review, as of the preceding five volumes of the series, is in the precise detail, the hard fact, and the discussion of these facts in the comments. One can see how arguments are reinforced by additional information, how they are modified or balanced by a variety of considerations, and how on occasion, they stand in stark contrast to each other, making inclusion in a summary meaningless.

For the planning, execution and presentation of a feasible project, this enterprise of the Maritime History Group of the Memorial University of Newfoundland can stand as a model.

In conclusion, congratulations are due the initiators and supporters of a job well done, and the participants for an illuminating cooperative enterprise.

URSULA LAMB

University of Arizona

# IN ACKNOWLEDGEMENT AND APPRECIATION

The trustees and staff of the Peabody Museum of Salem wish to thank the following individuals and institutions for their generous financial support of *The American Neptune* during 1986:

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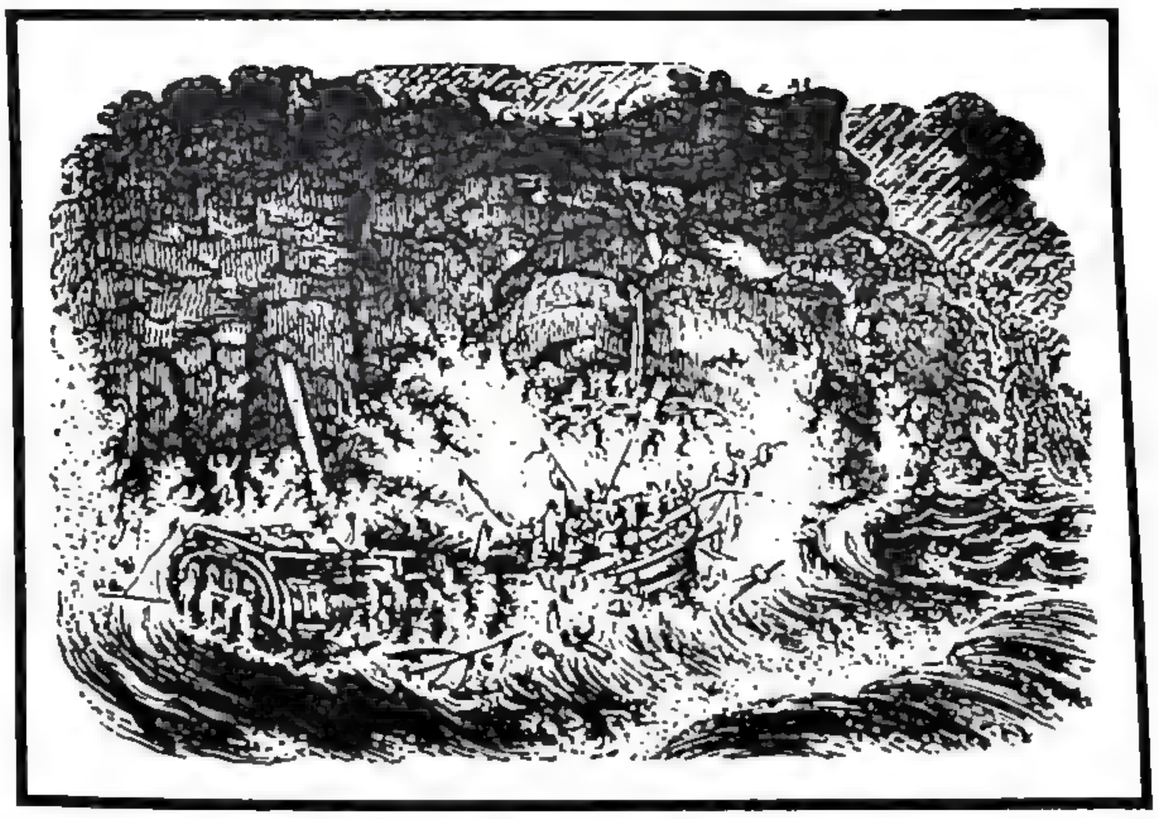

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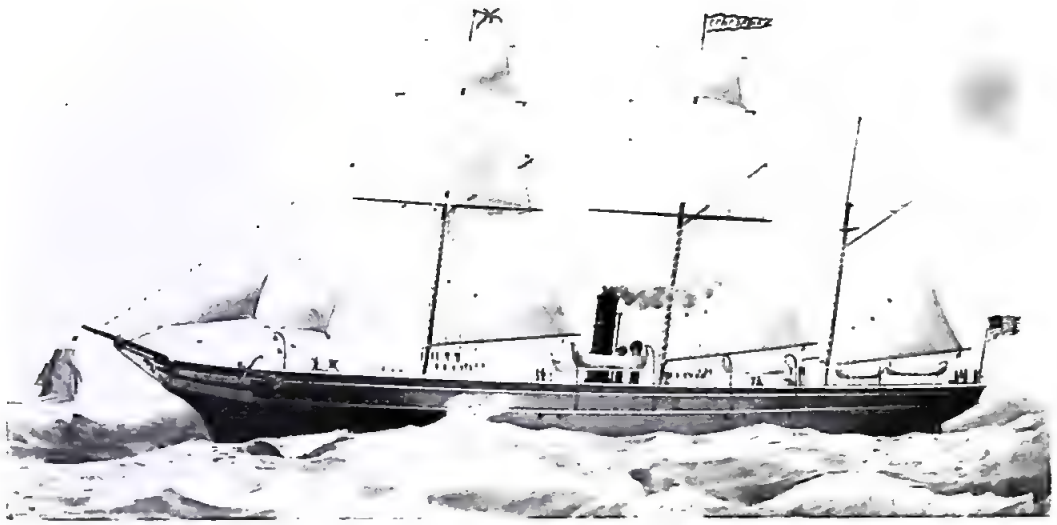

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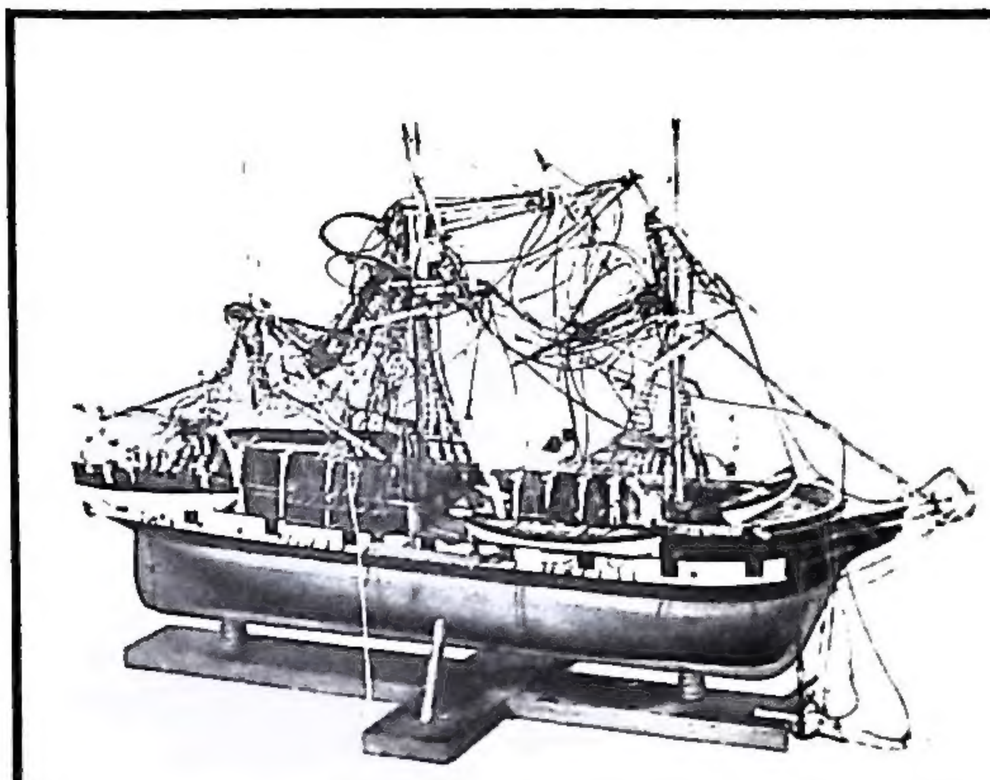

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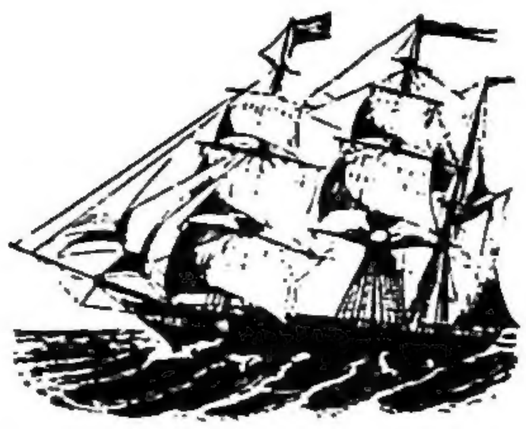

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1. Title of Publication: *The American Neptune.*
   A. Publication No. *0003-0155.*
2. Date of Filing: *30 September 1986.*
3. Frequency of Issue: *Quarterly.*
   A. No. of Issues Published Annually: *4.*
   B. Annual Subscription Price: *$32.00 domestic; $35.00 foreign.*
4. Complete Mailing Address of Known Office of Publication: *East India Square, Salem, MA 01970.*
5. Complete Mailing Address of the Headquarters of General Business Offices of the Publisher: *Peabody Museum of Salem, East India Square, Salem, MA 01970.*
6. Full Names and Complete Mailing Address of Publisher, Editor, and Managing Editor:
Publisher *The Peabody Museum of Salem, East India Square, Salem, MA 01970.*
Managing Editor *Archibald R. Lewis, Peabody Museum of Salem, East India Square, Salem, MA 01970.*
Assistant Editor *W. Stuart Morgan, III*
7. Owner:
*Peabody Museum of Salem, East India Square, Salem, MA 01970*
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| 10. Extent and Nature of Circulation: | | |
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| 2. Mail Subscriptions | 885 | 855 |
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